

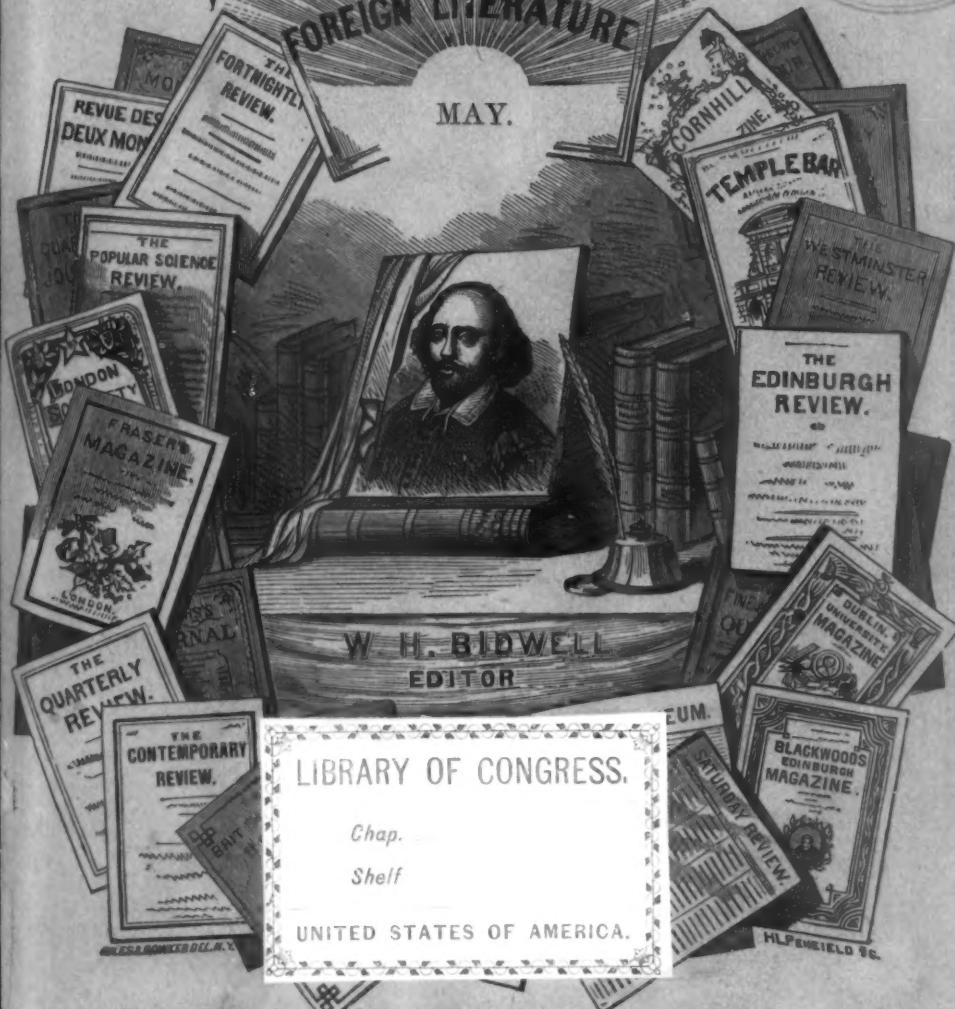
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New Series.

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THE ECLECTIC MAGAZINE OF FOREIGN LITERATURE

MAY.



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PUBLISHER'S NOTE.

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FIRST IMPRESSIONS OF THE NEW REPUBLIC.

BY FREDERIC HARRISON.

THE Republic in the true sense of the word is hardly a month old in France, and the difference which a few weeks have produced is already visible on all sides. And it is far more visible to one who observes it on the spot, than it can be to those who catch but faint echoes of the change across the channel, in a hurried column of promiscuous telegrams. As we watch it in the midst of the movement, the prevailing spirit appears as one of confidence. After eight years of struggle France has established a Republic, real, solid, and peaceful. The President, Senate, and Chamber; the ministry, the military and civil services; the government, the electors, the public, the press, speakers and writers, are all at last in fair harmony and working agreement. Whilst the parties hostile to the Republic are disorganized and hopeless to a degree that they have never before appeared, the friends of

the constitution appear like men conscious that they have behind them, as no doubt they have, the immense weight of the nation.

The difficulties in the way of this, the greatest political experiment of our age—the closing of the French Revolution, and the founding of a permanent Republic in the midst of monarchic Europe—are still undoubtedly great. They are great both without and within. Wars like that of 1870, and insurrections like that of 1871, are not to be wiped out from the history of a nation in less than a generation. The traces of these great events still float on the surface of the deep calm stream like the foam and the eddies below Niagara. And he would be a very sanguine or a very superficial observer of French politics who should think that, with M. Waddington at the Foreign Affairs, France has nothing to do but to pay compliments and receive

them from her European neighbors, or that with M. Grévy for President of the Republic, all French Republicans have got everything that they can desire. Within and without France has her difficulties before her, and one of the best signs of the day is that all serious Frenchmen seem perfectly *alié* to this fact. Still, on the whole, the tone of the Republican body at least, of all sections of it, from the most hesitating converted Orleanist to the most factious Irreconcilable, exhibits the belief that the French Republic has a better prospect before it than it has ever had before.

It is a time in France of new departures. The Republic governed by Republicans is a new departure, the most emphatic of all! Solis the surrender of the old parties. The Bonapartists begin to hedge; Raoul Duval is a good Republican; Baron Haussmann will no longer sit with the Corsicans; and the *Figaro* forswears politics, much as Falstaff forswears sack. The only surviving minister of Louis Philippe becomes the latest life senator by the unanimous choice of the Republican majority. The Minister of War rises in the tribune and calmly says, "Without doubt the 'Marseillaise' will be treated by the army as the national air of France." Epaulettes and swords are no longer in fashion in official places. The Commander-in-Chief of the French army is a man who never in his life wore a cocked hat, or a particle of lace on his coat; and the French army is practically under civilian control as much as our own. Hardly more soldiers are now to be seen in the streets of Paris than in the streets of London, and nobody but the *bonnes* seem to feel their absence. The new President has but one fixed idea in politics, and that is to efface the person in power, and to exhibit only the power of the law. The Marshal, whom he has just displaced, says, "M. Grévy, you are the most honest man I know!" and the Marshal's friends submit with a good grace. The Republican parties have certainly not decided to agree; but they all agree in saying, "And now to work!" And really the amount of practical work, administrative and legislative, that has been done in the few weeks that have elapsed since

M. Grévy became President is something remarkable. The *mot d'ordre* which one hears five times a day (and which even M. Emile de Girardin finds it pay to enforce every evening) is a new departure in itself. "Surtout, point de Blague!" Truly this is a very remarkable result in the ninetieth year since the Feast of Pikes.

In a state of things in which so much is new, the organization of the Government itself is not among the least of the new things. As a problem of constitutional law it will probably be found that the actual constitution of France is a far from simple or familiar experiment. It is anything but easy to analyze the existing system of Government and to determine the proportional weight of its various elements. We are constantly debating the question, wherein lies the true centre of power in the France of to-day? Is the Presidency more like that of the United States, or more like a simple constitutional Monarchy? What are the respective positions in actual power of the President of the Republic, of the First Minister, of the President of the Chamber? Is M. Gambetta in the position of Mr. Brand, or in the position of M. Rouher under the Empire? Is M. Waddington on even terms with Lord Beaconsfield and Prince Bismarck as the prime minister of a party with an immense majority; or is M. Waddington in the same position as Mr. Hayes's Secretary of State? Is M. Grévy the real ruler of France, as Oliver Cromwell was the real ruler of England; or does he occupy the place of the King of the Belgians, of Dr. Schenck, the respected President of the Swiss Confederation, or of President Hayes in America? Lastly, how far is a Ministry in France the master of the two Houses, or the servant of the two Houses, or of either House? Does the future of the party depend on M. Waddington, on M. Grévy, or on M. Gambetta, or on no one of them?

It is pretty clear that these questions, important as they are, do not admit of any simple answer. The elements of the actual system in France are decidedly complicated, and leave room for a great deal of modification by men and by circumstances. It will be seen that it is open to the First Minister, or to

the President of the Republic, or to the President of the Chamber, being, any one of them, a man of transcendent powers, to make himself the real ruler of France when the balance of forces is tolerably even. Down to the beginning of this year, everything was in abeyance. The President of the Republic was the sulky captive of the Chamber of Deputies, which itself was neutralised by a hostile Sénat. A ministry had been forced on Marshal Macmahon whilst it was itself barely tolerated by the Chamber of Deputies. On the other hand, the Chamber could not insist on a ministry after its own heart, or attempt legislation such as it was sent up to promote, because it was checkmated by an adverse Senate, and a practically hostile body of officials. Hence there has been a whole year of simple expectation. The key of the position was the Senatorial election of January 5th. The great Republican triumph brought the two Chambers into effective harmony with each other. This virtually determined the resignation of the Marshal. And that practically involved a new ministry frankly willing to carry out the views of the great Republican majority, not only in active legislation but in recasting the whole administrative body, civil, military, judicial, and diplomatic.

It is obviously open to a man, or to a set of men, with energy and a strong purpose, to determine in a new way the true centre of power. As matters stand, the various powers are feeling their way, and settling into fixed relations. The constitution is still in a somewhat fluid condition. But it can hardly be doubted that of the three powers at present at work, Presidency, Ministry, Chamber, the ministry is the least stable and the least master of the situation. It could indeed hardly be otherwise. For nearly thirty years at least, ministers in France have been rarely anything but agents and servants of some real ruler behind them, and they have never once been the representatives of the national feeling, or even the chiefs of a dominant party. Louis Napoleon chose his ministers, just as he chose his generals or his ambassadors, as the best men whom he could get to serve the immediate purpose. The last thing he ever expected of them was to appear to the nation as rulers, or

to represent a party great or small. And he changed them as soon as they failed to serve the turn, as soon as they seemed to be becoming too unpopular or too powerful. M. Thiers chose ministers with whom he more or less agreed, according as circumstances and the Assembly permitted him to act; and Marshal Macmahon had various ministers forced on him by invisible coalitions and coteries. But no minister, not even the Duc de Broglie, can be said to have been the real head of a dominant party in the nation. Nor has any minister within these thirty years held power in France by virtue of his commanding a solid parliamentary majority. Parliamentary majorities undoubtedly placed M. Thiers in power, and then Marshal Macmahon; but they were presidents, not ministers, and their ministers were simply their agents. And, for the present at least, the habits and elements of the Chamber make a settled parliamentary majority, a thing to count on like Lord Beaconsfield's majority, or Count Cavour's majority, entirely impossible in France.

There are, in fact, none of the conditions there which make the Prime Minister in England the real source of power, and the practical embodiment of the dominant policy for the time being. Ministers in France are not at all of necessity members of either Chamber, and they not unfrequently belong to neither. They have the right of addressing the Chamber, but they often appear there simply to be put on their trial. There is no standing parliamentary representative of each department in both houses. The serious work of examining measures almost always takes place in the *bureaux*. And the ministers who are not members of the House are not members of the *bureaux*. It is impossible for ministers, who are public officials, but not, except by accident, members of the Chamber, and who have no control over the business of the House, or over the work of its committees, to obtain what we call an efficient control over the House, or even to form a compact and permanent majority in the House.

On the other hand, if the ministers are not chiefs of a dominant parliamentary party, they have no other representative character. They are not the

choice of the nation in any sense ; they hardly ever address the nation as Lord Beaconsfield or Mr. Gladstone does ; and they are very often wholly unknown to the country outside some official or political group. The Prime Minister is himself distinctly nominated by a ruler, and not by his outgoing predecessor, or by a sovereign performing a complimentary duty. He does not select his colleagues in anything like the same sense that an English Prime Minister does ; his colleagues are not at all in the same degree of harmony with him, or in subordination to him, as with us ; and he certainly cannot get rid of them with anything like the same facility. When they meet in council it is not he who presides and leads the council, but the President of the Republic whose ministers they are, and who, even when he is Marshal Macmahon, is far from being an ornamental and simply nominal chairman.

It is a necessary result of a system which makes political activity centre in the choice of a President of the Republic, that the Prime Minister can hardly be the first power in the State. A great parliamentary statesman might possibly, in course of years, create the conditions in which he might form a party and ultimately occupy the position of Count Cavour or Lord Palmerston ; but none of the elements exist at present. We cannot too completely recognise to ourselves that, given the present conditions there, a ministry in France is not the same thing as a ministry in England, and that a change of ministers has much less significance than it has with us. The future of the French Republic depends on things of which the permanence of M. Waddington's Cabinet is one of the least. No one can see M. Waddington and his colleagues sitting on the official bench of the Chamber of Deputies, of which only a small part of them are members (the official bench which has often been merely a dock to so many unlucky ministers), without an irresistible impression that the Prime Minister is in no sense whatever the "leader of the House." He has no control over its business ; he attends there to give explanations and to hear remonstrances or advice. But he does not affect, and he does not possess, any acknowledged

ascendancy over the Chamber ; and it is difficult to see how he can possibly obtain it. M. Waddington is a very popular and a very capable man ; but since in the Chamber the business of the day and the conduct of the debate are in the control of M. Gambetta ; since in the Senate he has to meet so many politicians of vastly greater experience and reputation ; since in council he has to conform to the decisions of M. Grévy, whose position and judgment are alike superior to his own, it is quite clear that M. Waddington is not the person who really holds power in France.

Is the President, then, the preponderant element in the French Republic as he is in the United States ? Does M. Grévy hold the place of General Grant, or even of M. Thiers, during his tenure of the office ? It cannot be denied that the President of the French holds a very different position from that of the President of the American Republic. The latter is chosen by the entire nation ; and his election is the great and almost single battle-field of rival parties. He is elected wholly independently of the two Houses ; he can act, and to some extent govern, without them, and in many ways he can appeal over their heads to the nation, his real constituents. Circumstances and the more recent history of the country have brought the Congress into a doubtful position in public opinion, and what the civil war and its consequences gave in importance to the President they took away from the Congress. All these circumstances are different in France. There the President of the Republic is chosen, not by the nation, but by the two Houses. As a fact, he was little known to the country ; his election was a parliamentary *coup de main*, and he is in no sense the chief of a great party. The constitution and recent history have given an immense place to the Senate and the Chamber ; and the President of the Republic cannot appear in either. M. Thiers was undoubtedly the head of a great party, and the best-known man in France ; and he possessed the right of addressing the Assembly, and exercised it. On the other hand, circumstances have centred the political interest round the Chamber of Deputies ; it was in that that the great battle of the Republicans

and the reaction was fought. Lastly, the body over which M. Gambetta has so long exercised an ascendancy could not be otherwise than a co-ordinate power, at least, in the State.

Hence the constitution, the late history of France, the forms of the political struggle, and the personality of M. Gambetta, have all created a state of things in which it is far from easy for the President of the Republic to exercise anything like paramount authority. M. Grévy is, in fact, the nominee of a Chamber which circumstances have made the central authority in the nation, which is, in a very singular degree, a representative body, and which is habitually under the control of a man far more popularly known and far more representative than himself. M. Grévy would have, in truth, to strain the constitution, and to undo the work of recent years, if he were bent on making himself the dominant authority in the State. But M. Grévy is the last man in France who would consent to strain the constitution, or who would wish to be the dominant authority anywhere. M. Grévy is an almost fanatical apostle of the idea of no dominant authorities of any kind but the laws and the magistrates. And if the history and the silent forces of France all tend, as I believe they do, towards personal government of some kind, the sole approaches to it seem occupied by a man who has a religious horror of personal government. The remarkable change by which the election of President of the Republic is given to the Chambers and not to the nation is his own cherished principle. To consider himself as the servant of the Chambers, to speak of himself as an impersonal exponent of the law, to sink himself in his public functions as completely as a judge sinks himself in giving judgment, to abstain from presenting himself to the French nation at large, from addressing them, from imposing his will upon them, almost from affecting to speak in their name—this is M. Grévy's idea of a Republican president. Right or wrong, it is not likely that in the hands of a man like that, the office of president will be made the central authority of the State.

It is, therefore, to the two Houses, and especially to the Chamber of Depu-

ties, that we must look for the real seat of power. Circumstances have all combined to place the lower House in a position of signal importance. Gambetta seized the occasion of the dissolution under the 16th of May to make the struggle almost a duel between the Marshal and his council on the one side, and the "363" Deputies on the other. The 363 are now 383, or more, and may possibly soon nearly reach the famous figure of 400 in a House with a nominal total of 534. It is through them, by them, and in their name, that the great battle of the Republic has been fought. They are, for the most part, working and business politicians, almost all men of local influence, and disciplined by a long and most trying struggle. And, finally, they have been held together, created as a party, and practically trained in politics by M. Gambetta, whom nothing can prevent from being the most dominant person in France. In the Chamber of Deputies, then, lies, for the present at least, the centre of power in France.

At the same time, if this tendency should ultimately settle into a parliamentary government, it will be a parliamentary government of a very new and complex kind. If the Chamber of Deputies ever becomes the dominant element, it must be remembered that it is under conditions which mark it off emphatically from the House of Commons. In the first place, there is the Presidency, which all the traditions of French history, and the tendency of French habits, point out as the natural centre of authority in the nation. And the Presidency is now filled by a man who, if his theories drive him to neutralise his office, is still a man of imposing character and of solid judgment. M. Grévy, in spite of himself, can never quite become a constitutional king. Again, the Senate, if it have a smaller *vis inertiae* than the House of Lords, and is far inferior to it in strength as a purely conservative force, is still made up almost entirely of men whose lives have been passed in public affairs, who have acquired a great reputation of various kinds, and who, whatever else they are, are men of industry and of brains. The Senate in France is not made up of a dozen ex-judges, a dozen ex-ministers, a few hundred lords-lieutenant of spotless propri-

ety and respectable intentions, and a ruck of sporting, fashionable, or diletanti non-entities who are too much bored even to appear in their places. Not one French senator in fifty but has been a hard worker all his life, but who has had, and may still have, his ambitions and his ideas. Consequently, if the Chamber of Deputies is ever to become, as it is becoming, the seat of power, it must do so by remaining in working harmony with both President and Senate.

But there is more. If this is ever to become a parliamentary government, it will be so by a system highly indirect and singularly novel. The actual machinery of Parliament, as now at work in France, constitutes in fact an experiment in political art of a most interesting and original kind. The parliamentary government, as practised in the Chamber of Deputies, is something totally different from parliamentary government with us, as well as different from the government of Assemblies such as we have hitherto known it in France and elsewhere. What we understand by parliamentary government is one in which laws are passed and the executive is controlled in public sittings of one or more Chambers. With us the House sits for eight or ten hours consecutively; all measures are fully debated, usually several times, in full sitting; not only the principle, but the details and clauses of every bill are there discussed in the entire House, and the entire process of government, as well as that of legislation, goes on under the criticism and subject to the pressure of the great party dualism which is always in full activity. The ministry are practically, if not technically, the choice of the majority of the House of Commons, and are regularly treated as the chiefs and representatives of that majority. On their side, they have a paramount influence over that majority, and consequently over the House and the entire Parliament. No serious measure has a chance of success unless it initiates with them or is adopted by them. The ministry also practically controls the entire business of the House, and becomes responsible for the public action of Parliament, since it does in effect determine that action. Again, the

general course of policy, as well as every important measure, is criticised and defended from day to day in a perpetual series of great public debates. The House of Commons becomes in truth an immense Cabinet, in which, under full publicity and by its oratorical and parliamentary resources, the Government carries on its work before the nation by means of a recognised and unhesitating majority.

In the typical continental Assembly or Convention, the Government is of an even more democratic type, inasmuch as the ministry is usually a mere agency of the Chamber, and there is no settled and disciplined majority which follows its party chiefs with unhesitating obedience. The consequence is that measures and policies are publicly debated in a more or less oratorical fashion, and are frequently determined under great excitement as the result of a stormy interchange of speeches. A government like this ceases to have much continuity, and degenerates often into government by public meeting, as our system too often degenerates into government by artificial parties.

Now the French system at present at work is something totally different from both systems just described. The key of it lies in the fact that the true business is carried on, not in the public sittings, but in the small private committees. At this moment these committees are eleven in number, in a House actually of five hundred and twenty members. The usual attendance is about thirty, and it seldom exceeds forty. The eleven *bureaux* are chosen by lot out of the entire House, so that a minority is usually able to win one or more of the *bureaux*. The special committees are formed by each of these *bureaux* choosing a member. And all the great questions are referred to select committees thus chosen. In them, and not in the public sittings, the work is seriously done. These smaller committees usually sit in private. None but members are present, and the discussions are not made public. The committee chooses its own chairman and its own reporter. The report is ultimately submitted to the entire House, which has the right to accept it or modify it at will. But the effect of a carefully considered report

by a committee so doubly sifted is usually decisive, and the recommendations of the committee are for the most part accepted.

The mode in which it works is thus. A measure of great public importance—say the law on the Amnesty—is proposed by the Government. Instead of the Minister introducing his measure to the whole House in a long and elaborate speech, he simply reads his *projet de loi*. This, without any public discussion, is referred to the *bureaux*. In these eleven *bureaux* into which the House is divided by lot, the bill is debated. Explanations of the ministers are demanded and various amendments are considered, as they can be in committees consisting of about thirty persons, where oratorical exuberance is out of the question. The eleven *bureaux*, after debate and sufficient consideration, choose each a member of the select committee, or in some cases each *bureau* chooses two members; and to this select committee the measure is finally referred. The select committee again appoints its sub-committee to examine a special branch of the question. The select committee, as does that on the electoral inquiry into the elections of October, 1877, may act with the most complete secrecy, it can prepare a report in any form, and it is usually armed with all the powers of the House. On the report of the select committee to the House the public debate is opened. But the question by that time has frequently been sifted, arranged, or decided "in the lobbies;" a few speeches are let off; the report has an enormous advantage, both in form and in information, over any outside member; and the House, if the majority are satisfied with the committee, usually pass the measure at once.

The public sittings are very often, in fact, only a sort of solemnity and free vent for grievances, vanities, crotchetts, and warnings. They at present only occupy two or three hours upon four days of the week. Even then, the *closure* at once acts as a stopper upon any obstructive tactics, and the habits of most French orators lead them to say what they have to say in twenty or thirty minutes at the outside. An interpellation, that is, an attack on a minister of the bitterest and most dangerous kind, will be all fired off in eight or ten sentences, and the minis-

ter's reply is over in as many minutes. With us when Mr. Gladstone makes "observations," and the Government "replies" in form, it often occupies the best part of a week. But at Versailles they hardly understand these things yet; a public sitting of two hours will dispose of two or three interpellations, will hear two or three ministers bring in each a bill, receive the reports of two or three select committees, listen or not listen to a long harangue from a Bonapartist or an Irreconcilable, will pass five or six laws that have been duly worked out in committee, will do an immense amount of informal work in the lobbies, and will get back to Paris to dinner by six or seven.

It is plain that this is not parliamentary government in our sense, and in fact it is parliamentary government of an altogether new order. It is, in fact, government by select committees. These select committees, it must be remembered, are chosen by a double system of choice; they work in secret, and they are directed to sift technical and administrative details. They are no doubt like our select committees, except that they are differently appointed; they have a more representative character; and whereas our great party questions are very rarely referred to a select committee, in France the most burning questions are absolutely intrusted to these bodies, and their decision is usually decisive. There are now sitting in Paris select committees on the great impeachment question and the election of 1877, on the amnesty bill, on the liberty of the press, on the right of public meeting, on lay education, on the conscription for the army, on the budget, and a number of similar questions of prime importance. The work of these special committees is in some ways more like that of the Council of the Secretary of State for India, than a mere "select committee" of the House of Commons. They are not appointed to shelve questions; to find a working compromise, or to collect a body of facts and opinions. In France they are distinctly appointed in order to work out the great questions, and to direct legislation and the executive. And they usually do the work very thoroughly and very speedily.

An institution like this must obviously acquire in time a preponderant influence

over public affairs, if only they are prepared to work hard, and can avoid conflicts amongst themselves and with the other powers in the State. Hitherto, it would seem, they retain a complete discipline, and give themselves honestly to work. The aspect, indeed, of the French deputies is strongly suggestive of work. There is a total absence of that turfite and mess-room element which gives such distinction to some more ancient parliaments. Except on the Bonapartist seats there is a singular absence of very young men ; and the revolutionary type is conspicuous by its absence. The dandy, the club-orator, the millionaire is not obtrusive. Most of them look like business men, of a rather economical turn. They might be merchants going on 'Change, or shareholders in a railway going to a meeting. As a matter of fact, the immense majority of the Republican deputies are men of nothing but local reputation and influence, who have been chosen for their business habits and their skill in marshalling the party in their departments.

Of course a body like this must require some guiding spirit to keep them at work and in harmony. This the Chamber of deputies has hitherto had in M. Gambetta. It is he who practically has organized this system of work by small select committees, meeting and discussing in private, and keeping a strict control over the entire action of government and legislation. His own particular committee, that of the budget, has been a type of the new method of parliamentary control. Now there is no reason to suppose that M. Gambetta will, in any sense, cease to direct this business activity of the Chamber. On the contrary, as President, he will be able to give a more general and systematic direction to it than he could as a private member. What has occurred that the influence of M. Gambetta should be lessened with the Republican majority ? When we reflect, we shall perceive that his influence rested in a very small degree on his speeches in the tribune. Under the Dufaure Ministry he appeared there very little, and in the great crises he often did not appear at all. His work was done in his seat, in the lobbies, in the committee rooms, in informal and secret consultations. No man probably ever acquired so great an

influence over any Chamber who so seldom made great speeches in it. About the fact of his ascendancy there can be no doubt whatever. It was similar to that exercised by Deak in the Hungarian Chamber, and was acquired by very similar means. It was the result of immense knowledge and resources, untiring industry and patience in all kinds of business, and a large temper and sympathy with every part of the national opinion. It was an influence gained by superior knowledge, superior judgment, and by the imposing prestige of vast political sagacity.

The President in the Chamber of Deputies occupies a dominant place visible to the eye, and patent in every act. He practically arranges the business of the House, in the same way as the "Leader of the House" does with us. He has all the authority which the Speaker with us might have, if he were at once Mr. Brand and Sir Stafford Northcote. He has a perfect right to take part in the debates ; and M. Gambetta will do so whenever it is needful. He will probably make nearly as many speeches in the tribune as he has done in the present Chamber as deputy. He determines the mode in which every question is put, the order in which all business is taken, and the proper form of dealing with each incident, law, or debate. He is expected to keep deputies straight, to lecture them, to cross-examine them, to correct their bad logic, and to rebuke them for silly remarks. He can also interfere when he thinks them wandering from the question, and also when he thinks they deserve a better hearing than they get. All this is quite traditional and accepted. M. Dupin would say, "I really cannot let you make such an exhibition of yourself." And M. de Morny would smile cruelly at an orator whom he had interrupted, and say, "Well, well, go on, monsieur." M. Grévy, the impeccable and impassive Rhadamanthus of the Republic, never of course descended to this outrageous insolence, nor will M. Gambetta. M. Grévy did everything he could to reduce the President to the level of the Speaker as a simple official of the House. But it is quite impossible that M. Gambetta, the first member of Parliament in France, can henceforth be less so, because he is officially President.

The President of the Chamber, be it remembered, is *ex officio* member of all the select committees ; and it is part of his duty to see that their work is done with dispatch and in due order. M. Gambetta is at this moment President of the Budget Committee, and he will in all probability himself move the report of it in the tribunal before the House. The President of the lower House, who is himself the reporter on the Budget Committee, who has paramount ascendancy in the House, is thus practically, if not officially, the real Chancellor of the Exchequer ; most assuredly when the Government is not very strong, and is nearly his own nomination. And this ascendancy which in the Committee on the Budget, the most important of all, M. Gambetta exercises in a direct way, he will exercise in a more or less indirect way over all the other committees. He will have the legal authority to press them for their report ; he can, if he think fit, himself take part in their sittings and press upon them his advice. Without actually controlling their report, he can require the report to be made, and perhaps can do much to color its effect. Even if the public sittings of the Chamber were the truly essential feature, which they are not, a President, even if he were not M. Gambetta, would have a predominant influence. But since the real work of the Chamber is done out of the public sittings, the President, being as he is M. Gambetta, will be the practical source of power. The President of the Chamber of Deputies, be he who he may, is in no sense a Speaker. He is legally the second authority in France, always at hand to take the place of the first ; and who if he be a man of great capacity and energy, may be actually the first in fact, if not in name.

As President of the public sittings M. Gambetta bids fair to become a most striking success. He is courteous, firm, patient, just, and business-like. His complete knowledge of the rules and work of the House, his inexhaustible command of parliamentary tactics, his skill and energy in repartee and sudden emergencies, his *bonhomie*, his good sense and entire belief in the dignity of his office, are already making themselves felt on both sides of the House. He is vociferously applauded by the Right when he cuts a

Republican orator short on a point of order ; and the whole Chamber is charmed when he begs them to listen to a tedious attack on a minister, " for the right of interpellation should be jealously guarded by the deputies, even when it is pushed," he cruelly adds, " to the point of exaggeration." M. Gambetta bids fair to make such a president as Lord Palmerston might have been, if he had had the constitutional task of being at once the leader of the House as well as the Speaker.

But it is not in the public sittings that the real duties of his own office or of the Chamber he directs should be looked for. The public are coming to find out that the real business is done out of sight. The new fashion in France is to work and not to talk. The serious journals, the deputies, the senate, the public utterances of all the leading authorities, ring with nothing but work, work ! In season and out of season, in public, in private, in his journal, and in the Chamber, M. Gambetta preaches on the text with which he closed his last great speech—*Laboremus*. He has taken that for the motto of the new régime. And the whole of his energy and power of infusing ideas is bent on filling the public mind and the mind of the deputies with the same conception of work. One can easily see how, with such a man and such a situation, with a body of deputies and of senators who, whatever else they are, are hardworking men, such an idea makes itself felt. M. Gambetta himself sets the example. Within a week he had introduced punctuality in the sittings, dispatch in the committees, and a general standard of industry and method.

Since this is the case, it is plain that M. Gambetta had some distinct purpose in view when he stepped from the benches to the President's chair. The history of the crisis of January can be written without any " secret information," or any "unimpeachable authorities." As things stood, M. Gambetta had no immediate prospect of being elected President of the Republic. He possibly thinks it doubtful if the President of the Republic is the real master of the situation. At any rate it was practically not open to him, and he hardly desires it as yet. He did not aim at being Prime Minister, or any minister, for the very good reason

that a minister holds not a very important, and certainly not a very secure place. But as M. Gambetta could not have the first place in France, he very naturally chose that which is the second place in authority, and which he may possibly make the first in real influence. He is, in spite of popular impression to the contrary, a man who from his earliest youth has been a most enormous worker. His whole ascendancy has been gained by work and not by speech. He has an incredible power of business; and his aim seems now to infuse into the Chamber he presides over the genius of work, and to make it by work the real leader of France.

If this result be attained, it will be undoubtedly a new and remarkable form of parliamentary government. It will be free in a great measure from some of the serious defects which have been urged against parliamentary government. Legislation and administration will be criticised and controlled not by an unwieldy and floating Assembly under the influence of the artificial excitement of debate, but by small committees, trained to work, and examining each question in a more patient and judicial way. The interruptions of factious orators, of bores, and crotchet-mongers, will be relegated to the comparatively harmless arena of the public sittings. The business men, and the practical men, will gain a considerable ascendancy; and the fluent expounders of "eternal principles" will have a very limited hearing. Each minister will find himself face to face with a select committee of the House, the members of which are mostly as well-informed as himself, and who can sift his projects far better in private sittings than in the storm of set debates. Of course the whole of this scheme of parliamentary control would break to pieces unless the Chamber itself could furnish an adequate supply of competent men with energy and zeal to make the committees real. But that is exactly what the present Chamber of Deputies does present. It has an unusual number of men of industrious habits and business capacity, and an unusually small proportion of men with a turn for rhetoric. No doubt, also, the machinery would break down if the Chamber fell into serious discord with the Senate or the Presi-

dent and his ministers. But at present there exists a substantial agreement. Lastly, no such system could long cohere without a guiding spirit to keep the party together, to spur the committees to combined activity, and to give them in effect a definite and common policy. But this guiding spirit the party has long had in M. Gambetta's. There seems every ground for believing that he has now acquired a position where this influence may be exerted in a far more thorough and systematic manner, and that without infringing on the letter or spirit of the constitution, and without the semblance of personal dictation. I retain in the strongest way my own private conviction, the settled conviction of our school, that the government of France, however completely Republican, should be frankly and openly personal in form. I believe that nothing else but personal leadership is suited to the genius of the nation or can long be permanent in that country. I believe that France, of all countries, is peculiarly unfitted for parliamentary government in its crude and direct form, and that every attempt to found a real parliamentary government in France necessarily deviates into a closer and more personal system. As a very real modification of the parliamentary system, as a compromise and transitional expedient, and especially as a disguised and softened form of personal government, the present system may do good service, and may lead to a permanent solution. It is a parliamentary system in which some of the worst vices of the parliamentary system are eliminated: a personal government in which some of the greatest stumbling-blocks of personal government are effectually neutralised or concealed.

With all this there is no reason why the difficulties and risks in the way of the Republic, great as they are, should not be successfully dealt with. The great burdens which cramp and weigh down the Republic may be summed up under two heads. The first is the fatal legacy of democratic dogma which it has received from the zealots who founded the new era in Europe. The second is that curse which it inherits from all preceding governments for centuries—the belief that it can alter opinions by laws, and can reform social states by the arm

of the judge and the sword of the police. The two things above all others needful are the Republic without the fanaticism of democracy, and an orderly government with entire liberty of opinion. What is wanted is a real Republic, animated by a Republican spirit, aiming at Republican objects, using Republican methods ; but centred in and directed by a capable man. There are strong tendencies in that direction, and the current of things is continually creating it anew ; but no one of the Republican spokesmen can venture to surrender the purest shibboleths of democracy. What else is wanted is a government strong enough to maintain unbroken peace, and a perfect respect for law, but which shall abandon all thought of punishing ideas, and shall make men feel that they must extirpate pernicious theories by confuting them, and not by silencing them. A society which is perpetually appealing to the jailer will never seriously apply itself to argument.

Great progress has undoubtedly been made in both directions. The difference between the Republic of M. Grévy and of M. Gambetta and the Republic of M. Lamartine and M. Ledru-Rollin is simply incalculable. The present Chamber of Deputies is utterly different from the Assembly of 1848 ; and the gulf, or rather antagonism, between the cities and the peasantry, as it existed at that date, is a thing of the past. The Republic is vastly better than its own democratic creed ; but that old democratic creed it cannot bring itself to surrender. M. Grévy, his ministers, and the leading politicians about them, are capable as well as honorable men. But it may be doubted if, in a country spontaneously set as a whole towards the lead of a man or of men, they may not carry too far their cherished theory of presenting the Republic as a coldly impersonal type. Their faith is that good government, equity, and peace will gradually extinguish all interest in the men by whom these are secured. Whilst the work is really done this may be so.

The problems they have to solve are not so severe but that patience and good sense may suffice to the work. They almost all may belong to the same class, for they arise out of the inveterate prejudices of ages that the duty of govern-

ments is to act on opinions by ordering this and by forbidding that. The demands of the most extreme Irreconcilable, as of the most extreme Ultramontane, turn round the same problem—liberty of discussion. No government in France, no party, no section, seems ever able to bring itself to suffer those who differ from it to express their own opinions. The Catholic thinks it his duty, having the power, to silence the unbeliever who desires to celebrate the merits of Voltaire ; the unbeliever feels it his duty to prevent the Catholics from chanting hymns in the streets ; the moderate Republican regards it as a crime not to suppress the witticisms of Rochefort ; and the ultra Republican is wild at the thought that Christian Brothers should teach little children. One and all in various degrees commit the same error, that they cannot distinguish illegal acts from pernicious opinions. Each insists that a body of men having the arm of the law, soldiers and police at hand, who neglect to punish the pernicious opinion, and to the utmost of their means exterminate the pernicious opinor, must secretly approve his doctrine, and are practically aiding him with the whole force of the State. A vicious circle is thus established. First one party and then another comes into power, and each in turn proceeds to exterminate the opposite opinions. The result is a perpetual and interminable outcry for liberty from one party or the other. And from this the only possible issue is a party or a man with the courage and good sense to lay down the simple principle that the State is responsible for order, and not for ideas, that it will suppress illegal acts and direct incitation to illegal acts, but that it has nothing whatever to do with opinions, however pernicious, and manifestations of feeling, however disgraceful.

Both in this country and in France we hear a great deal of nonsense about the extreme parties, and the extreme measures, and the violence of the ultra Republicans, and the terrible dangers of revolutionary fury. With many unthinking persons a complete glossary of cant has grown out of these big phrases. If these gloomy prophets would but ask themselves definitely what are the "extreme" measures which they foresee with

such horror, the extreme measures will be found to resolve themselves for the most part into a number of vapid people talking much grandiloquent stuff in public, and some hare-brained enthusiasts proposing many very silly schemes. The violence of the ultra Republicans means a scheme, which is yet quite in its infancy in France, to separate the State from the Church. Mr. Miall and Mr. Carvell Williams are far more "violent" in this matter than M. Victor Hugo and M. Louis Blanc, for the latter do not venture to suggest that the churches and cathedrals, buildings and lands of the Church should in any way be taken from its hands. Yet disestablishment can become in England a practical parliamentary question, is discussed on platforms and in chapels, and elaborate schemes for disendowing the Church are propounded and circulated. In France, such is the height to which cant has grown on the matter, the mildest proposal of disestablishment as a problem for the future is treated as a proof of "revolutionary violence."

Another extreme idea is that M. Rochefort should be permitted to sign his name to articles in French newspapers. Now M. Henri Rochefort has written his dismal snippets in Parisian papers for years, which nobody reads and nobody minds, sometimes under the recognised mark of "****" sometimes as "Henri R.*." Under the Marshal and the Duc de Broglie, these perfectly vapid sneers came out day after day, and no one was a bit the worse or a bit the better. And now, under the Republic, society is to be shaken to its foundations because at the end of the same stuff "Henri Rochefort" is to be read instead of "Henri R.*." So, too, half-a-dozen exiles have been writing in newspapers for years. What good they could do, or what harm they could do, is done already. Yet one of the extreme measures is, that men who have lost whatever influence they ever had, who are very poor writers and singularly helpless in action, are to be allowed to write their fatiguing rhodomontade in Paris, where it is published, instead of actually writing it in London, Brussels, or Geneva.

So, too, another extreme measure is the abrogation of that disgraceful law which prevents twenty persons from

meeting in a public room to discuss politics. A violation of freedom which every English political party would resent as the worst oppression, is defended as the bulwark of society by every man who calls himself "moderate," or "temperate," or "prudent," in France. We know full well that a government which cannot permit a public meeting to be held (subject to its own police regulations), or which only permits it by an idle artifice, has yet to learn the simplest elements of good or permanent order. Yet the cant in France is that it would be an extreme measure to permit open meetings to be held.

So, too, it would be an extreme measure to allow a trades union to be formed or to give it a legal recognition. Another extreme measure would be the withdrawal of the priests and religious confraternities from the primary public schools. No one desires to suppress the ecclesiastical schools, or to prevent the children of those who desire it from joining them. The simple demand is, that the schools which are entirely national or municipal shall not be intrusted to the hands of priests. There is a great deal to be said about secular public instruction in France, as in England, and difficulties undoubtedly occur which may require complex legislation. But to pretend that a proposal to withdraw all municipal primary schools from the control of priests is an act of "revolutionary fury," is enough to raise a smile even from Mr. Forster.

Another extreme measure, which, by the way, has hardly a chance of passing, is the restoration of the law of Napoleon authorising a legal divorce in cases similar to those of our own law. It does not need to be an admirer of the "sacred right of divorce" to see that a proposal to introduce it in a country where divorce is absolutely refused, is hardly an act of revolutionary fury. Yet such is the length to which party heat has carried political cant that we are gravely assured, not only in French but in English newspapers, that the family, property, society, order, religion, the education of youth, and the morality of the age, are in imminent danger of perishing together, if men in Paris are so much as allowed to meet and discuss politics, to form trade societies, to write and read

newspapers as they please, to pay no taxes for priests whom they abjure, to support no schools which are directed by ecclesiastics, to express their opinion about God or man in a legal and orderly way, if they are allowed to be married or buried without the intervention of the priest, so much as to propose schemes for the separation of Church and State, or for the restoration of the faculty of legal divorce.

Yet these things form the sum and substance of the entire political demands of the extreme Left. M. Louis Blanc and M. Victor Hugo are undoubtedly the authorised exponents of the extreme wing of the Irreconcilables. It is known to Europe, as much as to France, that both of them are men of noble character, of entire sincerity, and of the gentlest nature. The demands that they make are beyond question the real and full demands of the party they lead. What is it, then, that they demand? Nothing, absolutely nothing but what is already the commonplace of English political life, and the denial of which would set English parties of any shade in a fever of indignation. Here are their demands:—

1. The freedom to Frenchmen to meet and discuss public affairs subject to reasonable police regulations, and subject to every man answering for his words according to the law of sedition and libel.

2. Freedom to all Frenchmen to found, publish, write, or read any newspaper, pamphlet, or political manifesto, subject again to the common law of sedition and libel, but without the interference or censure of government or police.

3. Freedom to all Frenchmen to form associations of any kind—industrial, social, or political—without government intervention, subject always to the common law of treason, sedition, libel, and fraud.

4. Withdrawal of all public and municipal primary schools from the control of priests.

5. Reduction of the term of conscription and its application to all citizens equally.

6. Restoration of the law of the code Napoleon admitting the possibility of divorce.

7. Consideration of schemes for the ultimate separation of Church and State.
8. A complete amnesty for the political offences eight years old.

These are the whole of the demands put forward by the extreme wing of the Left. Those who talk so readily of extreme men and revolutionary fury should point to something more than this, if they knew it.

As to the amnesty measure, about which so much cant and timidity is shown, it is not at all solved by being trifled with. Here is the case of a few hundred insurgents, mostly club talkers or writers in the petty press, who after a most cruel extermination of their party, are dragging out a fretful existence in foreign cities or in prisons and penal settlements. No one affects to think that they can do anything, no one rates their influence high; they are divided, crushed, and despairing. Those of them who please write daily in the press of Paris, with no particular result. No one can prove that they individually committed any definite crime except the crime of taking part in the most hideous civil war, in which all individual responsibility was lost, and except in some cases the purely technical crime of "usurping public functions," a matter of course in all civil wars. Yet after a slaughter of some twenty thousand, the imprisonment and transportation of some ten thousand more, eight years of misery and exile, the existence of the Republic is supposed to depend on the continued exile of a few men whom no one pretends to fear, and who are now doing all that they have to do for good or for evil. To say that there is a time for all things, a time when party vengeance may be said to have done enough, a time when the Republic is strong enough to draw a veil over the horrible orgies of party excess on one side as much as the other, is to preach assassination, to justify anarchy, arson, and plunder.

Englishmen, at any rate, who are not under the blinding influence of party spirit, may fairly refuse to accept that dishonest and cowardly cant which insists on certain political maxims, not because they are wise or just, but simply to soothe the alarms of certain ignorant peasants. No one really thinks that free

political meetings could do any harm ; but what might be said might frighten the country electors. No one would care a rush whether Jules Vallés wrote his flowery diatribes in Paris or in London ; but the provinces would be shocked if they learned that the Republic had forgotten Jules Vallés. No one really wishes to give the children's schools to the priests and brothers ; but the *curés* would be terribly annoyed to learn that it was intended to withdraw them. No one cares a straw that a few newspapers dilate on the "social liquidation ;" but it is reassuring to ignorant countrymen to hear that the newspapers have been fined and prosecuted. No one is in the least afraid himself ; but everybody is desperately afraid that somebody else will be afraid. And the "somebody" else turns out to be the most ignorant and prejudiced class in the nation. And so, under pretext of being "moderate," and of discountenancing all "excesses," oppression and suppression are treated as the basis of the Republic, and murderous rancor is the only test of civic virtue.

If the Republic is to be really strong and lasting, it must cast off this affection of showing its moderation by its force of repression. A Republic cannot be established by the methods of Imperialism. The only *raison d'être* of a Republic is that it should deal with acts, but leave opinions free. If it guarantees complete order, and promotes the prosperity of the country, the peasants will come to see that it has done its true part, and that it is no part of its function to school the public into sound

views. As to the past, it must be remembered that both parties, reactionists and revolutionists, have at least as much to be forgotten and forgiven. If it is a crime to set fire to public buildings, it is a crime to massacre ten or twenty thousand people in cold blood, against not one in one hundred of whom anything could be proved, except that they had taken part in civil war. The Republic must have confidence, and it must inspire confidence by its own principles, and not by its zeal in punishing editors. And the first of its principles must be that citizens shall be free to express their opinions. A "social question" there is, and not all the policemen and soldiers in Europe will suffice to prevent that social question from making itself felt. Prince Bismarck may "go pig-sticking" among his Social Democrats, and M. Grévy may have editors fined ; but the social question will be in the front all the same. And the first duty of the Republic is to convince men in cities and in villages alike, that it has no call to interfere in the social question, that it will keep order and secure material well-being whilst the social question is debated and considered. — The Republic has a fair prospect before it ; it hears all men speak all good things of it, but it must show Republican confidence in itself. The one thing which we have a right to ask from the Republic is this, that it will put an end to the miserable system of so long a succession of governments which have sought first of all to extirpate ideas instead of promoting the welfare of the public. — *Fortnightly Review.*

PSYCHOMETRIC FACTS.

BY FRANCIS GALTON.

THERE lies before every man by day and by night, at home and abroad, an immense field for curious investigations in the operations of his own mind.

No one can have a just idea, before he has carefully experimented upon himself, of the crowd of unheeded half-thoughts and faint imagery that flits through his brain, and of the influence they exert upon his conscious life. I will describe a few of the results of my

own self-examination in respect to associated ideas.

It was after many minor trials that one afternoon I felt myself in a humor for the peculiar and somewhat severe mental effort that was required to carry through a sufficiently prolonged experiment as follows. I occupied myself during a walk from the Athenaeum Club, along Pall Mall to St. James's Street, a distance of some 450 yards, in keeping

a half-glance on what went on in my mind, as I looked with intent scrutiny at the successive objects that caught my eye. The instant each new idea arose, it was absolutely dismissed, and another was allowed to occupy its place. I never permitted my mind to ramble into any bye-paths, but strictly limited its work to the formation of nascent ideas in association with the several objects that I saw. The ideas were, therefore, too fleeting to leave more than vague impressions in my memory. Nevertheless, I retained enough of what had taken place to be amazed at the amount of work my brain had performed. I was aware that my mind had travelled, during that brief walk, in the most discursive manner throughout the experiences of my whole life; that it had entered as an habitual guest into numberless localities that it had certainly never visited under the light of full consciousness for many years; and, in short, I inferred that my every-day brain work was incomparably more active, and that my ideas travelled far wider afield, than I had previously any distinct conception of.

My desire became intensely stimulated to try further experiments, and, as a first commencement of them, to repeat the walk under similar circumstances. I purposely allowed a few days to elapse before doing so, during which I resolutely refused to allow my thoughts to revert to what had taken place, in order that I might undergo the repetition of the trial with as fresh a mind as possible. Again I took the walk, and again I was aware of the vast number of extremely faint thoughts that had arisen; but I was surprised and somewhat humiliated to find that a large proportion of them were identical with those that had occurred on the previous occasion. I was satisfied that their recurrence had in only a very few cases been due to mere recollection. They seemed for the most part to be founded on associations so long and firmly established, that their recurrence might be expected in a future trial, when these past experiments should have wholly disappeared from the memory.

It now became my object to seize upon these fleeting ideas before they had wholly escaped, to record and analyse

them, and so to obtain a definite knowledge of their character and of the frequency of their recurrence, and such other collateral information as the experiments might afford.

The plan I adopted was to suddenly display a printed word, to allow about a couple of ideas to successively present themselves, and then, by a violent mental revulsion and sudden awakening of attention, to seize upon those ideas before they had faded, and to record them exactly as they were at the moment when they were surprised and grappled with. It was an attempt like that of Menelaus, in the *Odyssey*, to constrain the elusive form of Proteus. The experiment admits of being conducted with perfect fairness. The mind can be brought into a quiescent state; blank, but intent; the word can be displayed without disturbing that state; the ideas will then present themselves naturally, and the sudden revulsion follows almost automatically. Though I say it is perfectly possible to do all this, I must in fairness add that it is the most fatiguing and distasteful mental experience that I have ever undergone. Its irksomeness arises from several independent causes. The chief of these is the endeavor to vivify an impression that is only just felt, and to drag it out from obscurity into the full light of consciousness. The exertion is akin to that of trying to recall a name that just, and only just, escapes us; it sometimes seems as though the brain would break down if the effort were persevered in, and there is a sense of immense relief when we are content to abandon the search, and to await the chance of the name occurring to us of its own accord through some accidental association. Additional exertion and much resolution are required, in carrying on the experiments, to maintain the form of the ideas strictly unaltered while they are vivified, as they have a strong tendency to a rapid growth, both in definition and completeness.

It is important, in this as in all similar cases, to describe in detail the way in which the experiments were conducted. I procured a short vocabulary of words, and laid it open by my side. I then put a book upon it in such a way that it did not cover the word that was about to be displayed, though its edge hid it

from my view when I sat a little backwards in my chair. By leaning forward the word came into sight. I also took many petty precautions, not worth describing, to prevent any other object besides the word catching my attention and distracting the thoughts. Before I began the experiment, I put myself into an easy position, with a pen in my right hand resting on a memorandum book, and with a watch that marked quarter seconds in my left hand, which was started by pressing on a stop, and continued going until the pressure was released. This was a little contrivance of my own appended to one of Benson's common chronographs. When I felt myself perfectly in repose, with my mind blank, but intent, I gently leant forward and read the word, simultaneously pressing the stop of the watch. Then I allowed about a couple of ideas to present themselves, and immediately afterwards released the stop and gave my utmost power of attention to appreciate with accuracy what had taken place, and this I recorded at once. Lastly, I wrote down at leisure the word that had been displayed, and the time shown by the chronograph to have been occupied by the experiment.

The number of words used in the experiments I am about to describe is seventy-five. I had intended it to be one hundred for the convenience of writing down percentages; but my original list became reduced by mislaying papers and other misadventures not necessary to explain. The result was that I procured a list of seventy-five words, which had been gone through as described, on four separate occasions, at intervals of about a month. Every precaution was used to prevent the recollection of what had taken place before from exercising any notable influence. It was not difficult to succeed in doing so, because the method of proceeding is permeated by the principle of completely discharging from the mind the topics on which it had previously been engaged.

I am particularly anxious that the fairness of the experiments should be subject to no undue doubt, and will therefore add yet a few more words about it. It may be thought an impossible feat to keep the mind as free and placid as I have described during the first part of the ex-

periment, when the great change of its attitude in the second part was imminent. Nevertheless, it was quite practicable to do so. The preoccupation of my thoughts was confined to a very easy task, viz., to govern the duration of the experiment. We have abundant evidence of the facility of this sort of operation. We all of us have frequent occasion to enter heart and soul into some matter of business or earnest thought, knowing that we have but perhaps five minutes' leisure to attend to it, and that we must then break off on account of some other engagement. Nay, we even go to sleep, intending to awake earlier or later than usual, and we do it. In the present case, after about two ideas had successively arisen, I succeeded, almost as a matter of routine, in lifting my finger from the spring stop, and that little act was perhaps of some assistance in helping me to rouse my consciousness with the sudden start that I desired.

Now for the results. I found, after displaying each word, that some little time elapsed before I took it in, chiefly because the process had been performed so quietly. If the word had been flashed upon a dark background in large and brilliant letters, or if some one had spoken it in an abrupt, incisive tone, I am sure that period would have been considerably shortened. Again, whenever we read a single substantive without any context or qualifying adjective, its meaning is too general to admit of our forming quickly any appropriate conception of it. We have no practice in doing so in ordinary reading or conversation, where we deal with phrases in block, and not with separate words. Hence the working of the mind is far less rapid in the experiments I am describing, than on common occasions, but not much less than it was in my walk along Pall Mall.

I found the average interval that elapsed between displaying the word, and the formation of two successive ideas associated with it, to be a little less than two and a quarter seconds—say at the rate of fifty in a minute or three thousand in an hour. These ideas, it must be recollected, are by no means atomic elements of thought; on the contrary, they are frequently glimpses over whole provinces of mental ex-

periences and into the openings of far vistas of associations, that we know to be familiar to us, though the mind does not at the moment consciously travel down any part of them. Think what even three thousand such ideas would imply if they were all different. A man's autobiography, in two large volumes of five hundred pages each, would not hold them, for no biography contains, on an average, three such sequences of incident and feeling in a page. There must therefore be, of a necessity, frequent recurrences of the same thought ; and this fact was brought out quite as prominently by these experiments as by my walks along Pall Mall. They were also elicited in a form in which I could submit them to measurement.

The seventy-five words gone through on four successive occasions made a total of 300 separate trials, and gave rise between them to 505 ideas in the space of 660 seconds. There were, however, so many cases of recurrence that the number of different ideas proved to be only 279. Twenty-nine of the words gave rise to the same thought in every one of the four trials, thirty-six to the same thought in three out of the four trials, fifty-seven to two out of the four, and there were only one hundred and sixty-seven ideas that occurred no more than once. Thus we see how great is the tendency to the recurrence of the same ideas. It is conspicuous in the reiteration of anecdotes by old people, but it pervades all periods of life to a greater extent than is commonly understood, the mind habitually rambling along the same trite paths. I have been much struck by this fact in the successive editions, so to speak, of the narratives of explorers and travellers in wild countries. I have had numerous occasions, owing to a long and intimate connection with the Geographical Society, of familiarising myself with these editions. Letters are in the first instance received from the traveller while still pursuing his journey ; then some colonial newspaper records his first public accounts of it on his re-entry into civilised lands ; then we hear his tale from his own lips, in conversation in England ; then comes his memoir read before the society ; then numerous pub-

lic speeches, and lastly his book. I am almost invariably struck by the sameness of expression and anecdote in all these performances. (I myself went through all this, more than a quarter of a century ago, on returning from South-West Africa, and was quite as guilty of the fault as any one else). Now one would expect that a couple of years or more spent in strange lands among strange people would have filled the mind of the traveller with a practically inexhaustible collection of thoughts and tableaux ; but no, the recollections tend to group themselves into a comparatively small number of separate compositions or episodes, and whatever does not fit artistically into these is neglected and finally dropped. We recollect very few of the incidents in our youth, though perhaps in old age we shall think very frequently of that little. Let any man try to write his autobiography, say between the ages of five and six, and he will find that he has exhausted everything he can recollect of that period in a very few pages. Let him meet, for the first time after very many years, with some friend of his boyhood, and talk over some interesting event in which they were both engaged, and of which his recollection is so vivid that he believes he can have forgotten none of its incidents. He will assuredly find, if his experience at all resembles my own, that he and his friend have retained very different versions of the same occurrence, that in each case persons who had played an important part in it had wholly dropped from the memory, and that the conversation will have recalled many facts to both the speakers that had almost passed into oblivion. We recollect the memories of incidents, or the memories of those memories, rather than the incidents themselves ; and the original impression, like the original anecdote in the well-known game of 'Russian scandal,' receives successive modifications at each step until it is strangely condensed and transformed.

I divided such part of the 279 different ideas as admitted of it into groups, according to the period of my life when the association that linked the idea to the word was first formed, and found that almost exactly the half of those that recurred either twice, thrice, or four times,

dated back to the period when I had not yet left college, at the age of twenty-two. Of those that did not recur in any of the trials the proportion that dated previously to the age of twenty-two to those of later date was a little smaller, viz., as three to four. All this points to the importance of an early education that shall store the mind with varied imagery, and may form just one-half the basis of the thoughts in after life.

The 279 different ideas fell into three groups. Those in the first and most numerous were characterised by a vague sense of acting a part. They might be compared to theatrical representations in which the actors were parts of myself, and of which I also was a spectator. Thus the word 'a blow' brought up the image of a mental puppet, a part of my own self, who delivered a blow, and the image of another who received one; this was accompanied by an animus on my part to strike, and of a nascent muscular sense of giving a blow. I do not say that these images and sensations were vivid or defined—on the contrary, they were very faint and imperfect; indeed, the imperfection of mental images is almost necessary to mobility of thought, because the portions of them that are not in mental view or even in mental focus at the same instant, admit of being changed to new shapes, and so the mental imagery shifts with less abruptness than it would otherwise do. The effect partakes more of the character of the changes in a diorama and less of that of a sudden transformation scene. I am not aware that this very common sort of ideas has ever been christened or even so clearly recognised before as I think it deserves to be; therefore I will call it 'histrionic.' I find it to be a most important agent in creating generalisations.

The second group of ideas consists of mere sense imagery, unaccompanied by any obscure feeling of muscular tension or action; such as mental landscapes, sounds, tastes, &c. I showed, in a paper read before the Anthropological Society last year,* how generalised images admitted of being produced. I took a number of portraits of different persons, who were all represented in the same at-

titudes and of the same size, and I threw photographic images of these, one on the top of the other, by a contrivance there described, on the same sensitised photographic plates. The result was a picture compounded of that of all the different persons; and so much more numerous are the points of resemblance than those of dissimilarity in different human faces, that the composite picture looked as though it had been taken from a real living individual a little out of focus, and who had somewhat moved during the process. I then pointed out that 'a composite portrait represents the picture that would rise before the mind's eye of a man who had the gift of pictorial imagination in the highest degree.' It is clear, from the evidence of these composites, that generalised images are no chimæras.

So much for the second group of ideas. The third and last group consisted of purely verbal associations, whether the mere names of persons or things, or bits of quotations in prose or verse.

The seventy-five words were similarly divisible into three groups. The first included such words as 'abasement,' 'abhorrence,' 'adoration,' and 'acclamation,' all of which could be perfectly expressed in pantomime, and generally gave rise to histrionic ideas. The second group comprised 'abbey,' 'aborigines,' 'abyss,' and the like, all of which admitted of sense representation, either by a visual image, or, in the case of such a word as 'acid,' by some other sense. In the third group were the words 'afternoon,' 'ability,' 'absence,' 'actuality,' and others of a like abstract character, difficult to apprehend and realise, and tending to give rise to purely verbal associations. But as two ideas were registered on each occasion, the eight results were usually dispersed among all the groups, though in unequal proportions.

Experiments such as these allow an unexpected amount of illumination to enter into the deepest recesses of the character, which are opened and bared by them like the anatomy of an animal under the scalpel of a dissector in broad daylight. If we had records of the self-examination of many persons, and compared them, I think we should be much

* *Journal of the Anthropological Institute*, viii. p. 134; or *Nature*, May 23, 1878, p. 97.

impressed by the differences between one mind and another, in the quality, wealth, and appropriateness of their associated ideas, and we should wonder that mutual misunderstandings were not more frequent even than they are.

I found the purely verbal associations to contrast forcibly in their rapid, mechanical precision with the tardy and imperfect elaboration of highly generalised ideas ; the former depending on an elementary action of the brain, the latter upon an exceedingly complicated one. It was easy to infer from this the near alliance between smartness and shallowness.

It so happens that my mental imagery concerns itself more with aspects of scenery than with the faces of men, as I have rather a good memory for localities, and much pleasure in thinking about them, while I am distressed by natural inaptitude for recollecting features. I was therefore surprised to find that the names of persons were just twice as frequent in my associations as that of things, including places, books, and pictures. The associated words that formed part of sentences or quotations were twenty-seven in number, and tended strongly to recurrence. The majority were of good verse or prose ; the minority were doggrel. I may as well specify their origin. Four of the verse quotations were from Tennyson, two from Shakespeare, and eight from other sources partly doggrel. Of the prose, five were from the Bible, and seven from other sources, partly grotesque, and some of them family phrases. I suspect there is a great deal of rubbish in the furniture of all our brains.

The occasional vividness of an idea is very startling, and I do not see my way to explaining it fully ; but sometimes I am sure it is due to the concurrence of many associations, severally of small intensity, but in the aggregate very effective. An instance of this is the powerful effect produced by multitudes subject to a common feeling of enthusiasm, religious fervor, or pure panic. In the few occasions on which I have had the opportunity of experiencing such manifestations, it seemed to me that every one of the multitudinous sounds and movements that reached the ear and eye, being inspired by a common feeling, added its

effect to that of all the others. When we are in the presence of a single person or of a small company, the empty background fills a large part of the field of view and dilutes the visual effect of their enthusiasm. Nay, the larger part of the forms of the persons themselves are similarly inexpressive, unless they be consummate actors. But nothing is seen in an enthusiastic multitude but excited faces and gestures, nothing is heard but excited voices and rustlings. Their variety is such that every chord in the heart of a bystander, that admits of vibrating in sympathy with the common feeling, must be stimulated to do so by some of them.

The background of our mental imagery is neither uniform nor constant in its character. It changes in color, tint, and pattern, though, in my case, all these are usually very faintly marked, and it requires much attention to study them properly. Its peculiarities have nothing to do with associated ideas ; they appear to depend solely upon chance physiological causes, to which some of our ideas are also undoubtedly due.

The usual faintness of highly generalised ideas is forcibly brought home to us by the sudden increase of vividness that our conception of a substantive is sure to receive when an adjective is joined to it that limits the generalisation. Thus it is very difficult to form a mental conception corresponding to the word 'afternoon ;' but if we hear the words 'a wet afternoon,' a mental picture arises at once, that has a fair amount of definition. If, however, we take a step further and expand the phrase to 'a wet afternoon in a country house,' the mind becomes crowded with imagery.

The more we exercise our reason, the more we are obliged to deal with the higher order of generalisations and the less with visual imagery ; consequently our power of seeing the latter becomes blunted by disuse. Probably, also, the mind becomes less able to picture things to itself as we advance in age. I am sure there is wide difference between my mental imagery now and what it was when I was a child. It was then as vivid and as gorgeous as in a dream.

It is a perfect marvel to me, when watching the working of my mind, to

find how faintly I realise the meaning of the words I hear or read, utter or write. If our brain work had been limited to that part of it which lies well within our consciousness, I do not see how our intellectual performances would rise much above the level of those of idiots. For instance, I just now opened a railway prospectus, and the following words caught my eye, the purport of which was taken in block—' An agreement will be submitted for the consideration and approval of the proprietors on Friday next'—yet I am certain that I had not, and I doubt if I could easily obtain, a good general idea corresponding to any one of the six principal words in the passage, 'agreement,' 'submitted,' 'consideration,' 'approval,' 'proprietors,' and 'Friday.' If I puzzle over the words in detail until I fully realise their meaning, I lose more than I gain; there is time for the previous words to slip out of mind, and so I fail to grasp the sentence as a whole.

The more I have examined the workings of my own mind, whether in the walk along Pall Mall, or in the seventy-five words, or in any other of the numerous ways I have attempted but do not here describe, the less respect I feel for the part played by consciousness. I

begin with others to doubt its use altogether as a helpful supervisor, and to think that my best brain work is wholly independent of it. The unconscious operations of the mind frequently far transcend the conscious ones in intellectual importance. Sudden inspirations and those flashings out of results which cost a great deal of conscious effort to ordinary people, but are the natural outcome of what is known as genius, are undoubtedly products of unconscious cerebration. Conscious actions are motived, and motives can make themselves attended to, whether consciousness be present or not. Consciousness seems to do little more than attest the fact that the various organs of the brain do not work with perfect ease or co-operation. Its position appears to be that of a helpless spectator of but a minute fraction of a huge amount of automatic brain work. The unconscious operations of the mind may be likened to the innumerable waves that travel by night, unseen and in silence, over the broad expanse of an ocean. Consciousness may bear some analogy to the sheen and roar of the breakers, where a single line of the waves is lashed into foam on the shores that obstruct their course.—*The Nineteenth Century.*

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GODWIN AND SHELLEY.

BY LESLIE STEPHEN.

THE poetic and the metaphysical temperaments are generally held to be in some sense incompatible. Poets, indeed, have often shown the highest speculative acuteness, and philosophy often implies a really poetical imagination. But the necessary conditions of successful achievement in the two cases are so different that the combination of the two kinds of excellence in one man must be of excessive rarity. No man can be great as a philosopher who is incapable of brooding intensely and perseveringly over an abstract problem, absolutely unmoved by the emotion which is always seeking to bias his judgment; whilst a poet is great in virtue of the keenness of his sensibility to the emotional aspect of every decision of the intellect. For the one purpose, it is es-

sential to keep the passions apart from the intellect; for the other, to transfuse intellect with passion. A few of our metaphysicians have ventured into poetical utterance. Berkeley wrote a really fine copy of verses, and Hobbes struck out one famous couplet—

And like a star upon her bosom lay
His beautiful and shining golden head,

in a translation of Homer, otherwise not easily readable. Scott proposed to publish the whole poetical works of David Hume, consisting of a remarkable quatrain composed in an inn at Carlisle.*

* Hume's biographer, Mr. Hill Burton, gives some other verses attributed to Hume; but the impartial critic must admit that they are of inferior merit.

Here chicks in eggs for breakfast sprawl,
Here godless boys God's glories squall,
Here Scotchmen's heads do guard the wall,
But Corby's walks atone for all.

The only exception to this rule in our literature seems to be Coleridge. Coleridge undoubtedly exercised a vast influence upon the speculation of his countrymen, whilst his poems possess merits of the rarest order. It is more worthy of remark that his poetry is successful pretty much in proportion as he keeps it clear of his philosophy. In *Christabel*, the *Ancient Mariner*, or *Kubla Khan*, we can only discover the philosopher by the evidence of a mind richly stored with associations, and by the tendency to discover a mystical significance in natural objects. Some people would urge that his philosophy would have been improved if it had been equally free from poetical elements. In any case, Coleridge is an example of a combination of diverse excellence not easily to be paralleled. Another poet was supposed by some of his admirers to have similar claims upon our respect. Shelley seems to have thought himself as well fitted for abstract speculation as for poetry; and his widow declared that had he lived longer, he might have "presented to the world a complete theory of mind; a theory to which Berkeley, Coleridge, and Kant would have contributed; but more simple, unimpugnable, and entire than the systems of those writers." The phrase is by itself enough to prove Mrs. Shelley's incompetence to form any opinion as to her husband's qualifications for this stupendous task. It is not by forming a patchwork of Berkeley, Kant, and Coleridge that a "complete theory of mind" is likely to be evolved; nor does it appear that Shelley really knew much about either of the latter writers; certainly, he has not given the smallest proof of a power of original speculation in such matters. And yet, though it would be absurd to treat Shelley seriously as an originator of philosophic thought or even as a moderately profound student of philosophy, there is no doubt that his poetry contains a philosophical element which deserves consideration if only to facilitate the comprehension of his poetry.

Enough has been written by the competent and the incompetent, the prosaic

and the poetical, the hyperbolical panegyrists and the calm analytical critics, of Shelley considered primarily as a poet. Nobody, as it seems to me, is entitled to add anything who has not himself a very unusual share, if not of Shelley's own peculiar genius, at least of receptivity for its products; and after all that has been written by the ablest writers, one can learn more of Shelley by getting, say, the *Adonais* or the *Ode to the Skylark* by heart than by studying volumes of talk about his works. At any rate, I feel no vocation to add to the mass of imperfectly appreciative disquisition. Recent discussions, however, seem to show both that some interest is still taken in the other aspect of Shelley's writings, and that an obvious remark or two still remains to be made. People are in doubt whether to classify Shelley as atheist, pantheist, or theist; they dispute as to whether his writings represent the destructive spirit which undermines all that is good amongst men, or, on the contrary, are the fullest expression yet reached by any human being of the divinest element of religion. Were it not that some parallel phenomena might be very easily suggested, it would be surprising that the meaning of a writer, who had extraordinary powers of expressing himself clearly and an almost morbid hatred of anything like reticence, should be seriously doubtful. The explanation of the wonder is not, I think, very far to seek. For one thing, people have not yet made up their minds as to the true bearing of some opinions which Shelley undoubtedly held. The question whether they were of good or evil import is mixed up with the question as to whether they were true or false. Upon that problem I shall not touch; but a few pages may be occupied by an attempt to indicate what, as a matter of fact, Shelley actually held, or rather what was his general attitude as to certain important questions. One result will probably be that it matters very little what he held so far as his influence upon our own conclusions is concerned. For, to say nothing of Shelley's incapacity to deal satisfactorily with the great controversies of his own time, our point of view has so much shifted that we can consider his opinions almost as calmly as those of the Eleatics

or the Pythagoreans. They are matters of history which need affect nobody at the present day.

The volume of essays by the late Mr. Bagehot, recently published, contains one upon Shelley, which deals very clearly and satisfactorily, as far as it goes, with this part of Shelley's work. Mr. Bagehot showed with his usual acuteness how Shelley's philosophy reflected the abnormal peculiarities of his character. He speaks less, however, of certain extraneous influences which must have materially affected Shelley's intellectual developments, and indeed, seems to have partly overlooked them. He tells us, for example, that Shelley's poems show an "extreme suspicion of aged persons." Undoubtedly a youthful enthusiast is apt to be shocked by the dogged conservatism of older men who have been hammered into a more accurate measure of the immovable weight of superincumbent prejudice in the human mind. Shelley could not revolt against things in general without contracting some dislike to the forces against which he inevitably ran his head at starting. Even here, indeed, the charm of Shelley's unworldly simplicity for men of an opposite type, for cynics like Hogg, and Peacock, and Byron, is one of the pleasantest indications of his character. He attracted, and doubtless because he was attracted by, many who had nothing but contempt for his favorite enthusiasms, and it is still more evident that, however wayward was his career in some relations of life, he had a full measure of the young man's capacity for reverence. Dr. Lind seems to have been his earliest idol; but a far more important connection was that with Godwin. Godwin was in his fifty-sixth and Shelley in his twentieth year, when their correspondence began, and Godwin's most remarkable book was published when Shelley was in the cradle. Young gentlemen of nineteen, even though they belong to the immortals, consider a man of fifty-six to be tottering upon the verge of the grave. Books published before we could spell appear to have been composed before the invention of letters. To Shelley, in short, Godwin was to all intents and purposes a venerable sage, and a fitting embodiment of hoary wisdom. A guide, phil-

osopher, and friend—an oracle who can sanction his aspirations and direct him to the most promising paths—is almost a necessity to every youthful enthusiast; the more necessary in proportion as he has more emphatically broken with the established order. What J. S. Mill was to men who were in their early youth some twenty or thirty years ago, or Dr. Newman to young men of different views at a slightly earlier period, that Godwin was to Shelley in the years of his most impetuous speculation. A lad of genius reads old books with eager appetite and learns something from them; but to get the full influence of ideas he must feel that they come from a living mouth, clothed in modern dialect, and applied to the exciting topics of the day. Perhaps neither Mill nor Dr. Newman said anything which might not be found implicitly contained in the writings of their spiritual ancestors. Much of Mill is already to be found in Locke, and Dr. Newman is at times the interpreter of Butler. But then Butler and Locke have been dead for a long time; and what the impatient youth requires is the direct evidence that the ancient principles are still alive and efficient. The old key has probably become rusty, and is more or less obsolete in form. The youth cannot wait to oil and repair it for himself. He wants the last new invention spick and span, and ready to be applied at once to open the obstinate lock. Shelley read Helvetius and Holbach, and Berkeley and Hume; but, though they supplied him with a tolerably modern version of some ancient theories, they could not tell him by anticipation what precise form of argument would best crush Paley, or what specific policy would regenerate Ireland out of hand. For such purposes a young man wants the very last new teacher, and the chances are that he will read even the older philosophers through the spectacles which such a teacher is kind enough to provide.

Thus, when looking about in this dark world, given over as he thought to antiquated prejudice embodied in cruel injustice, poor Shelley greeted the writings of Godwin as the lost traveller greets a beacon-fire on a stormy night. They seemed to contain a new gospel. When he discovered the author to be a

real human being, not one of the fixed stars that have been already guiding us from the upper firmament, he threw himself at the philosopher's feet with the rapt fervor of a religious neophyte. In his first letters to Godwin, he pours out his heart : " Considering these feelings" (the feelings, namely, of reverence and admiration which he has entertained for the name of Godwin), " you will not be surprised at the inconceivable emotions with which I learnt your existence and your dwelling. I had enrolled your name in the lists of the honorable dead. I had felt regret that the glory of your being had passed from this earth of ours. It is not so ; you still live, and, I firmly believe, are still planning the welfare of human kind." A letter written soon afterwards from Dublin is still more significant. It begins with a kind of invocation as to a saint. " Guide thou and direct me," exclaims the young gentleman ; " in all the weakness of my inconsistencies bear with me ; . . . when you reprove me, reason speaks ; I acquiesce in her decisions." He presently defends the impatience which Godwin has blamed by an argument which evidently struck even Godwin as having an absurd side. The *Political Justice*, he says, was first published nearly twenty years before (or almost at the dawn of history !), but yet what has resulted from the general diffusion of its doctrines ? " Have men ceased to fight ? Have woe and misery vanished from the earth ?" Far from it ! Obviously something must be done and that at once. Do I not well to be impatient, he says, when such reasonable expectations have been so cruelly disappointed ?

It must be a most delightful sensation to have so ardent a disciple ; but it must also be a trifle provoking when the ardor is of a kind to justify some misgiving as to the sanity of the proselyte. Even the vanity of a philosopher could hardly blind him to the fact that such extravagance tended to throw ridicule upon its object. Godwin, however, kept his countenance—a little too easily perhaps—and gave very sensible advice to his proselyte. He pointed out in substance that it was not altogether amazing that vice and misery had survived the publication of his wonderful book, and still recommended patience

and acceptance of the strange stupidity of mankind. We may suppose that in later years Shelley's reverence lost a little of its warmth : he came to know Godwin personally. Moreover, amongst his other tenets, the calm philosopher held the comfortable doctrine that philosophers might and ought to receive pecuniary assistance from the rich without any loss of dignity. The practical application of this theory may perhaps have helped to convince Shelley that Godwin was not altogether free from earthly stains, and in fact not so indifferent as he ought to have been to the possible advantages of a connection with the heir to a baronetcy and a good estate.

For the present, however, Shelley sat humbly at Godwin's feet. He declared that from the *Political Justice* he had learnt " all that was valuable in knowledge and virtue." He mixed with the queer little clique of vegetarians and crotchet-mongers who shared his reverence for Godwin and excited the bitter contempt of Hogg. It is, therefore, not surprising that we find Shelley's doctrines to present a curiously close coincidence with Godwin's. Partly, no doubt, it was simply a coincidence. Shelley's temperament predisposed him to accept conclusions which were in the air of the time, and which were to be found more or less represented in many of his other authorities. But, at any rate, we may fairly assume not only that he, as he was eager to proclaim, learnt much from Godwin, but also that his whole course of thought was guided to a great degree by this living representative of his favorite theories. He studied the *Political Justice*, pondered its words of wisdom, and examined its minutest details. One trifling indication may be mentioned. Amongst Shelley's fragmentary essays is one upon " A System of Government by Juries"—a " singular speculation," as Mr. Rossetti naturally remarks. But the explanation is simply that Godwin's theory, worked out in the *Political Justice*, sets forth government by these so-called juries as the ultimate or penultimate stage of human society. Shelley, like a faithful disciple, was writing an incipient commentary upon one of his teacher's texts. The fragmentary *Essay on Christianity*, of about the same

date (1815), is virtually an attempt to show that the valuable part of the Christian religion is its supposed anticipation of Godwin's characteristic tenets. But the coincidence does not consist in any minute points of external resemblance. Godwin's political writings seem to have been pretty well forgotten, though some interest in him is maintained by *Caleb Williams* and by his relationship to Shelley. Hogg is evidently anxious to sink as much as possible the intellectual obligations of the disciple to so second-rate a teacher; and later writers upon Shelley are content to speak vaguely of Godwin as a man who had some philosophic reputation in his day, and some influence upon the poet. A full exposition of Godwin's theories would display the closeness of the mental affinity. That may be found elsewhere; but a brief indication of his main tendencies will be sufficient for the present purpose.

Godwin appeared to many youthful contemporaries—as may be seen from the brilliant sketch in Hazlitt's *Spirit of the Age*—as a very incarnation of philosophy. "No work in our time," says Hazlitt, "gave such a blow to the philosophical mind of the country as the celebrated *Enquiry concerning Political Justice*. Tom Paine was considered for the time a Tom Fool to him, Paley an old woman, Edmund Burke a flashy sophist. Truth, moral truth, it was supposed, had here taken up its abode, and these were the oracles of thought." Hazlitt is not given to measuring his words, and he was probably wishing to please the decaying old gentleman. But doubtless there is some truth in the statement. Godwin was admirably fitted to be an apostle of reason, so far as a man can be fitted for that high post by the negative qualifications of placid temper and singular frigidity of disposition. He works out the most startling and subversive conclusions with all the calmness of a mathematician manipulating a set of algebraical symbols. He lays down doctrines which shock not only the religious reverence, but the ordinary conscience of mankind, as quietly as if he were stating a proposition of Euclid. An entire absence of even a rudimentary sense of humor is of course implied in this placid enunciation of paradoxes

without the slightest perception of their apparent enormity. But then a sense of humor is just the quality which we do not desire in a revered philosopher.

It admits of more doubt whether Godwin possessed in any marked degree the positive qualification of high reasoning power. What is called "revengeless logic"—the ruthless sweeping aside of every consideration that conflicts with our deductions from certain assumptions—is as often a proof of weakness as of strength. Nothing is so easy as to be perfectly symmetrical and consistent, if you will calmly accept every paradox that flows from your principles, and call it a plain conclusion instead of a *reductio ad absurdum*. A man who is quite ready to say that black is white whenever the whiteness of black is convenient for his argument, may easily pass with some people for a great reasoner. Godwin, however, was beyond question a man of considerable power, though neither vigorous enough nor sufficiently familiar with the wider philosophical conceptions to produce results of much permanent value. Crude thinkers habitually mistake the blunders into which they, like their fathers before them, have fallen for genuine discoveries. They have once more made the old mistakes, and do not know that the mistakes have been exposed.

Godwin was familiar with the recent school of French materialists, and with the writings of Locke, Berkeley and Hume. He worked out by their help a system which curiously combines opposite modes of thought. He was, in one sense, a thorough-going sceptic. Nobody could set aside more completely the whole body of theological speculation. He assumes that all the old religions are exploded superstitions. He did not argue against Theism, like Shelley; and, indeed, arguments that might lead him into personal difficulty were not much to his taste. But he virtually ignores all such doctrine as undeniably effete. So far he, of course, sympathises with the French materialists, and with them he abolishes at one blow all the traditional and prescriptive beliefs of mankind. The fact that a doctrine has been generally accepted is a presumption rather against it than in its favor. He will believe nothing, nor even temporarily

accept any practical precept which is not capable of direct scientific proof. But, in the next place, Godwin did not in any sense accept the materialism of the French writers. He, like other English thinkers, had been profoundly impressed by the idealism of Berkeley—to whose remarkable influence upon his countrymen we are perhaps only beginning to do justice. But then he extends Berkeley by the aid of Hume. He abolishes not only matter but mind. It may be still convenient to use the word mind, but in fact there is nothing, so far as we know, but a chain of "ideas" which somehow link themselves together so as to produce the complex idea we generally know by that name. Of any substratum, any internal power which causes the coherence of these ideas or of the universe in general, we know and can know absolutely nothing.

When a man has got so far, he not unfrequently begins to feel himself a little bewildered. Nothing is left to quote from a philosopher of whom neither Godwin nor Shelley apparently ever heard—but "ceaseless change." "I know of no being, not even of my own. Pictures are—they are the only things which exist, and they know of themselves after the fashion of pictures; pictures which float past without there being anything past which they float, which by means of like pictures are connected with each other; pictures without anything which is pictured in them, without significance and without aim. I myself am one of these pictures—nay, I am not even this, but merely a confused picture of the pictures. All reality is transformed into a strange dream, without a life which is dreamed of, and without a mind which dreams it: with a dream which is woven together in a dream of itself. Perception is the dream; thought is the dream of that dream."

This description of the thorough-going sceptical position might pass (to anticipate for a moment) for a description of the state of mind produced by some of Shelley's poetry. It is, at any rate, a state of mind from which a reasoner is generally anxious to provide some escape, lest all ground for reasoning should be cut away. How can knowledge be possible, if the mind is merely a stream of baseless impressions, coher-

ing or separating according to radically unknowable laws? Godwin, however, goes on calmly, without any attempt to solve our difficulties, and proceeds to build up his scheme of perfectibility. Upon this shifting quicksand of utter scepticism he lays the foundations of his ideal temple of reason. For, as he argues, since a man is nothing but an aggregate of "ideas," he is capable of indefinite modification. Education or the influences of climate or race can have no ineradicable power upon this radically arbitrary combination of flitting phantasms. Anything may be the cause of anything; for cause means nothing but the temporary coherence of two sets of unsubstantial images. And hence, we may easily abolish all the traditional ties by which people have hitherto been bound together, and rearrange the whole structure of human society on principles of mathematical and infallible perfection. The force which is to weave ropes of sand, or rather to arrange the separate independent unsubstantial atoms in a perfect mathematical sphere, rounded, complete and eternal, is the force of reason.

Godwin is troubled by no misgiving as to the power of reason when all reality seems to have been abolished. He quietly takes for granted that reason is the sole and sufficient force by which men are or may be guided, and that it is adequate for any conceivable task. Not only can it transform society at large, but it is potentially capable of regenerating any given individual. The worst scoundrel could be made into a saint if only you could expose him to a continuous discharge of satisfactory syllogisms. Reason, as he calmly observes, is "omnipotent." Therefore, he infers, when a man's conduct is wrong, a very simple statement will not only show it to be wrong—just as it is easy to show that two sides of a triangle are greater than the third—but make him good. No perverseness, he thinks, would resist a sufficiently intelligible statement of the advantages of virtue. From this agreeable postulate, which he regards as pretty nearly self-evident, Godwin draws conclusions from some of which, great as was his courage in accepting absurdities, he afterwards found it expedient to withdraw. Thus, for

example, morality, according to him, means simply the right calculation of consequences—I must always act so as to produce the greatest sum of happiness. The accidental ties, the associations formed by contingent circumstances, are no more to override this principle than a proposition of Euclid is to vary when applied to different parts of space. Three angles of a triangle are as much equal to two right angles in England as in France. Similarly the happiness of an Englishman is just as valuable as the happiness of a Frenchman, and the happiness of a stranger as the happiness of my relations. Hence—so runs his logic—friendship, gratitude, and conjugal fidelity are simply mistakes. If my father is a worse man than a stranger, I should rather save the stranger's life than my father's, for I shall be contributing more to human happiness. If my wife and I are tired of each other, we had better form new connections, for it is unreasonable to sacrifice happiness to any accidental ties. Any particular rule, indeed, is so far a mistake: for to act upon such a rule is to disregard the general principles of reason. In every action and in every relation of life, I should hold myself absolutely free to act simply and solely with reference to the greatest happiness. Habits are bad, for habits imply disregard of reason, and all promises are immoral, for to keep a promise is to pay a blind obedience to the past. To punish is unreasonable; for, in pure reason, we have no more right to hate a villain than a viper or a cup of poison. The only legitimate end of punishment is reform, and reform should be produced by argument instead of imprisonment. All coercion is clearly bad, for coercion is not argument; and, since all government implies coercion, all government is immoral. Society, in short, must be reduced to an aggregate of independent atoms, free from all conventions, from all prescriptive rights and privileges, without the slightest respect for any traditional institutions, and acting at every moment in obedience to the pure dictates of reason.

When these principles have forced their way, and the omnipotence of reason shows their triumph to be only a question of time, we shall reach the mil-

lennium. Mind will then be omnipotent over matter (though it is rather hard to say what either of those two entities may be); kings, priests, laws, and family associations will disappear; and every man will live in perfect peace and happiness in the light of reason. One difficulty, indeed, suggests itself. Why, if reason be thus omnipotent, has it done so little in the past? Whence this persistence of inequality and injustice, this enormous power of sheer obstinate unreasoning prejudice in a set of beings which are to be so completely regeherated by the power of pure reason? Monarchy, he declares summarily, is founded on imposture. How, if reason be the one force, has imposture been so successful, and, if successful for so long, why should it not be successful hereafter?

To this Godwin has no very intelligible answer, or perhaps he hardly sees that an answer is desirable. But, in truth, his whole system appears to be so grotesque when brought to one focus and distinctly stated, that we must in fairness recall two things: first, that most philosophical systems appear absurd when summarised after their extinction; and, secondly, that in bringing out in a very brief space the most salient features of such a doctrine, it is quite impossible to avoid caricature. There is enough not only of apparent philosophy in it, but of really intelligent—though strangely one-sided—reflection to enable us to understand how this deification of reason, falling in with the most advanced movements of the time, should affect Shelley's simple, impulsive and marvellously imaginative nature. Men of much stricter logical training considered Godwin to be a great, if paradoxical thinker, and Shelley, who had rather an affinity for abstract metaphysical ideas than a capacity for constructing them with logical wholes, was for a time entirely carried away. When after reading Godwin's quiet prosaic enunciation of the most startling paradoxes in the least impassioned language, we turn to Shelley's poetical interpretation, the two seem to be related as the stagnant pool to the rainbow-colored mist into which it has been transmuted. Shelley's fervid enthusiasm has vaporized the slightly muddy philosophic prose,

changed it into impalpable ether, and tinged it with the most brilliant, if evanescent, hue. Shelley had certainly learnt from others besides Godwin, and in particular had begun those Platonic readings which afterwards generated his characteristic belief in a transcendental world, the abode of the archetypal ideas of beauty, love, and wisdom. But through all his poetry we find a recurrence of the same ideas which he had originally imbibed from his first master.

The Godwinism, indeed, is strongest in the crude poetry of *Queen Mab*, where many passages read like the *Political Justice* done into verse. So, for example, we have a half statement of the incoherent theory which has already been noticed in Godwin's treatise. After pointing to some of the miseries which afflict unfortunate mankind, and observing that they are not due to man's "evil nature," which, it seems, is merely a figment invented to excuse crimes, the question naturally suggests itself, to what, then, can all this mischief be due? Nature has made everything perfect and harmonious, except man. On man alone she has, it seems, heaped "ruin, vice, and slavery." But the indignant answer is given:—

Nature! No!
Kings, priests, and statesmen blast the human
flower
Even in its tender bud; their influence darts
Like subtle poison through the bloodless veins
Of desolate society.

According to this ingenious view, "kings, priests, and statesmen" are something outside of, and logically opposed to, Nature. They represent the evil principle in this strange dualism. Whence this influence arises, how George III. and Paley and Lord Eldon came to possess an existence independent of Nature, and acquired the power of turning all her good purpose to nought, is one of these questions which we can hardly refrain from asking, but which it would be obviously unkind to press. Still less would it be to the purpose to ask how this beneficent Nature is related to the purely neutral Necessity, which is "the mother of the world," or how, between the two, such a monstrous birth as the "prolific fiend" Religion came into existence. The crude incoherence of the whole system is too

obvious to require exposition; and yet it is simply an explicit statement of Godwin's theories put forth with inconvenient excess of candor. The absurdities slurred over by the philosopher are thrown into brilliant relief by the poet.

Shelley improved as a poet, and in a degree rarely exemplified in poetry, between *Queen Mab* and the *Prometheus*; but even in the *Prometheus* and his last writings we find a continued reflection of Godwin's characteristic views. Everywhere as much a prophet as a poet, Shelley is always announcing, sometimes in exquisite poetry, the advent of the millennium. His conception of the millennium, if we try to examine precisely what it is, always embodies the same thought, that man is to be made perfect by the complete dissolution of all the traditional ties by which the race is at present bound together. In the passage which originally formed the conclusion to the *Prometheus*, the "Spirit of the Hour" reveals the approaching consummation. The whole passage is a fine one, and it is almost a shame to quote fragments; but we may briefly observe that in the coming world everybody is to say exactly what he thinks; women are to be—

gentle radiant forms,
From custom's evil taint exempt and pure;
Speaking the wisdom once they could not think,
Looking emotions once they feared to feel.

Thrones, altars, judgment seats and
prisons are to be abolished when reason
is absolute; and when—

The loathsome mask has fallen, the man re-
 mains
Sceptreless, free, uncircumscribed, but man
Equal, unclassed, tribeless, and nationless,
Exempt from awe, worship, degree, the king
Over himself.

To be "unclassed, tribeless, and nationless," and, we may add, without marriage, is to be in the lowest depths of barbarism. It is so, at least, in the world of realities. But the description will fit that "state of Nature" of which philosophers of the time delighted to talk. The best comment is to be found in Godwin. The great mistake of Rousseau, says that writer, was that whilst truly recognising government to be the source of all evil, he chose to praise the state which preceded government, instead of the state which, we

may hope, will succeed its abolition. When we are perfect, we shall get rid of all laws of every kind, and thus, in some sense, the ultimate goal of all progress is to attain precisely to that state of nature which Rousseau regretted as a theory of the past and which is described in Shelley's glowing rhetoric.

The difficulty of making this view coherent is curiously reflected in the mechanism of Shelley's great poem; great it is, for the marvel of its lyrical excellence is fortunately independent of the conceptions of life and human nature which it is intended to set forth. If all the complex organisation which has slowly evolved itself in the course of history, the expression of which is civilisation, order, coherence, and co-operation in the different departments of life, is to be set down as an unmitigated evil, the fruit of downright imposture, all history becomes unintelligible. Man, potentially perfectible, has always been the sport of what seems to be malignant and dark power of utterly inexplicable origin and character. Shelley, we are told, could not bear to read history. The explanation offered is that he was too much shocked by the perpetual record of misery, tyranny, and crime. A man who can see nothing else in history is obviously a very inefficient historian. Godwin tells us that he had learnt from Swift's bitter misanthropy the truth that all political institutions are hopelessly corrupt. A fusion of the satirist's view, that all which is bad, with the enthusiast's view, that all which will be will be perfect, just expresses Shelley's peculiar mixture of optimism and pessimism. When we try to translate this into a philosophical view or a poetical representation of the world, the consequence is inevitably perplexing.

Thus Shelley tells us in the preface to the *Prometheus*, that he could not accept the view, adopted by Æschylus, of a final reconciliation between Jupiter and his victim. He was "averse from a catastrophe so feeble as that of reconciling the champion with the oppressor of mankind." He cannot be content with the intimate mixture of good and evil which is presented in the world as we know it. He must have absolute good on one side, contrasted with absolute evil on the other. But it would seem—as

far as one is justified in attaching any precise meaning to poetical symbols—that the fitting catastrophe to the world's drama must be in some sense a reconciliation between Prometheus and Jupiter; or, in other words, between the reason and the blind forces by which it is opposed. The ultimate good must be not the annihilation of all the conditions of human life, but the slow conquest of nature by the adaptation of the life to its conditions. We learn to rule nature, as it is generally expressed, by learning to obey it. Any such view, however, is uncongenial to Shelley, though he might have derived it from Bacon, one of the professed objects of his veneration. The result of his own view is that the catastrophe of the drama is utterly inexplicable and mysterious. Who are Jupiter and Demogorgon? Why, when Demogorgon appears in the car of the Hours, and tells Jupiter that the time is come, and that they are both to dwell together in darkness henceforth, does Jupiter immediately give up with a cry of Ai! Ai! and descend (as one cannot help irreverently suggesting) as through a theatrical trap-door? Dealing with such high matters and penetrating to the very ultimate mystery of the universe, we must of course be prepared for surprising inversions. A mysterious blind destiny is at the bottom of everything, according to Shelley, and of course it may at any moment crush the whole existing order in utter annihilation. And yet, it is impossible not to feel that here, too, we have still the same incoherence which was shown more crudely in *Queen Mab*. The absolute destruction of all law, and of law not merely in the sense of human law, but of the laws in virtue of which the stars run their course and the frame of the universe is bound together, is the end to which we are to look forward. It will come when it will come; for it is impossible to join on such a catastrophe to any of the phenomenal series of events, of which alone we can obtain any kind of knowledge. The actual world, it is plain, is regarded as a hideous nightmare. The evil dream will dissolve and break up when something awakes us from our mysterious sleep; but that something, whatever it may be, must of course be outside the dream, and not a

consummation worked out by the dream itself. We expect a catastrophe, not an evolution. And, finally, when the dream dissolves, when the "painted veil" called life is drawn aside, what will be left?

Some answer—and a remarkable answer—is given by Shelley. But first we may say one word in reference to a point already touched. The entire dissolution of all existing laws was part of Shelley's, as of Godwin's programme. The amazing calmness with which the philosopher summarily disposes of marriage in a cursory paragraph or two, as (in the words of the old story) a fond thing, foolishly invented and repugnant to the plain teaching of reason, is one of the most grotesque crudities of his book. This doctrine has to be taken into account both in judging of Shelley's character and considering some of his poetical work. It is, of course, frequently noticed in extenuation or aggravation of the most serious imputation upon his character. We are told that Shelley can be entirely cleared by revelations which have not as yet been made. That is satisfactory, and would be still more satisfactory if we were sure that his apologists fully appreciated the charge. According to the story as hitherto published, we can only say that his conduct seems to indicate a flightiness and impulsiveness inconsistent with real depth of sentiment. The complaint is that he behaved ill to the first Mrs. Shelley, considered not as a wife, but as a human being, and as a human being then possessing a peculiar and special claim upon his utmost tenderness. This is only worth saying in order to suggest the answer to a casuistical problem which seems to puzzle his biographers. Is a man the better or the worse because, when he breaks a moral law, he denies it to be moral? Is he to be more or less condemned because, whilst committing a murder, he proceeds to assert that everybody ought to commit murder when he chooses? Without seeking to untwist all the strands of a very pretty problem, I will simply say that, to my mind, the question must in the last resort be simply one of fact. What we have to ask is the quality implied by his indifference to the law? If a man acts wrongly from benevolent feeling, mis-

guided by some dexterous fallacy, his error affords no presumption that he is otherwise intrinsically bad. If, on the other hand, his indifference to the law arises from malice, or sensuality, it must of course lower our esteem for him in proportion, under whatever code of morality he may please to shelter his misdoings.

In Shelley's particular case we should probably be disposed to ascribe his moral deficiencies to the effect of crude but specious theory upon a singularly philanthropic but abnormally impulsive mind. No one would accuse him of any want of purity or generosity; but we might regard him as wanting in depth and intensity of sentiment. Allied to this moral weakness is his incapacity for either feeling in himself or appreciating in others the force of ordinary human passions directed to a concrete object. The only apology that can be made for his selection of the singularly loathsome motive for his drama, is in the fact that in his hands the chief character becomes simply an incarnation of purely intellectual wickedness; he is a new avatar of the mysterious principle of evil which generally appears as a priest or king; he represents the hatred to good in the abstract rather than subservience to the lower passions. It is easy to understand how Shelley's temperament should lead him to undervalue the importance of the restraints which are rightly regarded as essential to social welfare, and fall in with Godwin's tranquil abolition of marriage as an uncomfortable fetter upon the perfect liberty of choice. But it is also undeniable that the defect not only makes his poetry rather unsatisfying to those coarser natures which cannot support themselves on the chameleon's diet, but occasionally leads to unpleasant discords. Thus, for example, the worshippers of Shelley generally regard the *Epipsychedion* as one of his finest poems, and are inclined to warn off the profane vulgar as unfitted to appreciate its beauties. It is, perhaps, less difficult to understand than sympathise very heartily with the sentiment by which it is inspired. There are abundant precedents, both in religious and purely imaginative literature, for regarding a human passion as in some sense typifying, or identical with, the passion

for ideal perfection. So far a want of sympathy may imply a deficiency in poetic sensibility. But I cannot believe that the *Vita Nuova* (to which we are referred) would have been the better if Dante had been careful to explain that there was another lady besides Beatrice for whom he had an almost equal devotion; nor do I think that it is the prosaic part of us which protests when Shelley thinks it necessary to expound his anti-matrimonial theory in the *Epipsychedion*. Why should he tell us that—

I never was attached to that great sect,
Whose doctrine is that each one should select
Out of the crowd a mistress or a friend,

and so on; in short, that he despises the "modern morals," which distinctly approve of monogamy? Human love, one would say, becomes a fitting type of a loftier emotion, in so far as it implies exclusive devotion to its object. During this uncomfortable intrusion of a discordant theory, we seem to be listening less to the passionate utterance of a true poet than to the shrill tones of a conceited propagator of flimsy crotchets, proclaiming his tenets without regard to truth or propriety. Mrs. Shelley does not seem to have entered into the spirit of the composition; and we can hardly wonder if she found this little bit of argument rather a stumbling-block to her comprehension.

To return, however, from these moral deductions to the more general principles. It is scarcely necessary to insist at length upon the peculiar idealism implied in Shelley's poetry. It is, of course, the first characteristic upon which every critic must fasten. The materials with which he works are impalpable abstractions where other poets use concrete images. His poetry is like the subtle veil woven by the witch of Atlas from "threads of fleecy mist," "long lines of light," such as are kindled by the dawn and "starbeams." When he speaks of natural scenery the solid earth seems to be dissolved, and we are in presence of nothing but the shifting phantasmagoria of cloudland, the glow of moonlight on eternal snow, or the "golden lightning of the setting sun." The only earthly scenery which recalls Shelley to a more material mind is that which one sees from a high peak

at sunrise, when the rising vapors tinged with prismatic colors shut out all signs of human life, and we are alone with the sky and the shadowy billows of the sea of mountains. Only in such vague regions can Shelley find fitting symbolism for those faint emotions suggested by the most abstract speculations, from which he alone is able to extract an earthly music. To insist upon this would be waste of time. Nobody, one may say briefly, has ever expanded into an astonishing variety of interpretation, the familiar text of Shakspeare—

We are such stuff
As dreams are made on, and our little lives
Are rounded with a sleep.

The doctrine is expressed in a passage in *Hellas*, where Ahasuerus states this as the final result of European thought. The passage, like so many in Shelley, shows that he had Shakspeare in his mind without exactly copying him. The Shakspearian reference to the "cloud-capped towers" and "gorgeous palaces" is echoed in the verses which conclude with the words—

This whole
Of suns and worlds, and men and beasts, and
flowers,
With all the violent and tempestuous workings
By which they have been, are, or cease to be,
Is but a vision: *all that it inherits*
Are motes of a sick eye, bubbles and dreams;
Thought is its cradle and its grave, nor less
The future and the past are idle shadows
Of thought's eternal flight—they have no being.
Nought is but that it feels itself to be.

The italicised words point to the original in the *Tempest*; but Shelley proceeds to expound his theory more dogmatically than Prospero, and we are not quite surprised when Mahmoud is puzzled and declares that the words "stream like a tempest of dazzling mist through his brain." The words represent the most characteristic effect of Shelley as accurately as the aspect of consistent idealism to a prosaic mind.

It need not be said how frequently the thought occurs in Shelley. We might fix him to a metaphysical system if we interpreted him prosaically. When in *Prometheus Panthea* describes to Asia a mysterious dream, suddenly Asia sees another shape pass between her and the "golden dew" which gleams through its substance. "What is it?" she asks. "It is mine other dream," replies Pan-

thea. "It disappears," exclaims Asia. "It passes now into my mind," replies Panthea. We are, that is, in a region where dreams walk as visible as the dreamers, and pass into or out of a mind which is indeed only a collection of dreams. The archaic mind regarded dreams as substantial or objective realities. In Shelley the reality is reduced to the unsubstantiality of a dream. To the ordinary thinker, the spirit is (to speak in materialist language) the receptacle of ideas. With Shelley, a little further on, we find that the relation is inverted; spirits themselves inhabit ideas; they live in the mind as in an ocean. Thought is the ultimate reality which contains spirits and ideas and dreams, if, rather, it is not simpler to say that everything is a dream.

The Faery-land of Spenser might be classified in our inadequate phraseology as equally "ideal" with Shelley's impalpable scenery. But Spenser's allegorical figures are as visible as the actors in a masque; and, in fact, the *Faery Queen* is a masque in words. His pages are a gallery of pictures, and may supply innumerable subjects for the artist. To illustrate Shelley would be as impossible as to paint a strain of music, unless, indeed, some of Turner's cloud scenery may be taken as representative of his incidental descriptions.

This language frequently reminds us of metaphysical doctrines which were unknown to Shelley in their modern shape. Nobody, perhaps, is capable of thinking in this fashion in ordinary life; and Shelley, with all his singular visions and hallucinations, probably took the common-sense view of ordinary mortals in his dealings with commonplace or facts. It is surprising enough that, even for purely poetical purposes, he could continue this to the ordinary conceptions of object and subject. But his familiarity with this point of view may help to explain some of the problems as to his ultimate belief. It is plain that he was in some sense dissatisfied with the simple scepticism of Godwin. But he found no successor to guide his speculations. Coleridge once regretted that Shelley had not applied to him instead of Southey, who, in truth, was as ill qualified as a man could well be to help a young enthusiast through the mazes

of metaphysical entanglement. It is idle to speculate upon the possible result. Shelley, if we may judge from a passage in his epistle to Mrs. Gisborne, had no very high opinion of Coleridge's capacity as a spiritual guide. Shelley, in fact in spite of his so-called mysticism, was an ardent lover of clearness, and would have been disgusted by the haze in which Coleridge enwrapped his revelations to mankind. But Coleridge might possibly have introduced him to a sphere of thought in which he could have found something congenial. One parallel may be suggested which will perhaps help to illustrate this position.

Various passages have been quoted from Shelley's poetry to prove that he was a theist and a believer in immortality. His real belief, it would seem, will hardly run into any of the orthodox moulds. It is understood as clearly as may be in the conclusion to the *Sensitive Plant*.

—in this life

Of error, ignorance, and strife,
Where nothing is, but all things seem,
And we see the shadows of the dream.

It is a modest creed, and yet
Pleasant if one considers it,
To own that death itself must be
Like all the rest, a mockery.

That garden sweet, that lady fair,
And all sweet shapes and odors there,
In truth have never passed away;
'Tis we, 'tis ours have changed; not they.

A fuller exposition of the thought is given in the *Adonais*; and some of the phrases suggest the parallel to which I refer. I have already quoted from one of the popular works of Fichte, the *Vocation of Man*, a vigorous description of that state of utter scepticism, which seems at one point to be the final goal of his idealism, as it was that of the less elaborate form of the same doctrine which Godwin had learnt from Berkeley. Godwin, as I have said, was content to leave the difficulty without solution. Fichte escaped, or thought that he escaped, by a solution which restores a meaning to much of the orthodox language. Whether his mode of escape was satisfactory or his final position intelligible, is of course another question. But it is interesting to observe how closely the language in which his final doctrine is set forth to popular readers resembles some passages in the *Adonais*.

I will quote a few phrases which may be sufficiently significant.

Shelley, after denouncing the unlucky *Quarterly Reviewer* who had the credit of extinguishing poor Keats, proceeds to find consolation in the thought that Keats has now become—

A portion of the eternal, which must glow
Through time and change, unquenchably the
same
Whilst thy cold embers choke the sordid hearth
of shame.

Peace, peace ! he is not dead, he doth not
sleep—
He hath awakened from the dream of life ;
'Tis we who, lost in stormy visions, keep
With phantoms an unprofitable strife,
And, in mad trance, strike with our spirit's
knife
Invulnerable nothings—we decay
Like corpses in a charnel, fear and grief
Convulse and consume us day by day,
And cold hopes swarm like worms within our
living clay.

So, when Fichte has achieved his deliverance from scepticism, his mind is closed for ever against embarrassment and perplexity, doubt, uncertainty, grief, repentance, and desire. "All that happens belongs to the plan of the eternal world and is good in itself." If there are beings perverse enough to resist reason, he cannot be angry with them, for they are not free agents. They are what they are, and it is useless to be angry with "blind and unconscious nature." "What they actually are does not deserve my anger ; what might deserve it they are not, and they would not deserve it if they were. My displeasure would strike an impalpable nonentity," an "invulnerable nothing," as Shelley puts it. They are, in short, parts of the unreal dream to which belong grief, and hope, and fear, and desire. Death is the last of evils, he goes on ; for the hour of death is the hour of birth to a new, more excellent life. It is, as Shelley says, waking from a dream. And now, when we have no longer desire for earthly things, or any sense for the transitory and perishable, the universe appears clothed in a more glorious form. "The dead heavy mass, which did but stop up space, has perished ; and in its place, there flows onward, with the rushing music of mighty waves, an eternal stream of life, and power, and action, which issues from the original source of all life—from thy life,

O Infinite One ! for all life is thy life, and only the religious eye penetrates to the realm of true Beauty. In all the forms that surround me, I behold the reflection of my own being, broken up into countless diversified shapes, as the morning sun, broken in a thousand dew-drops, sparkles towards itself," a phrase which recalls Shelley's famous passage a little further on.

Life, like a dome of many colored glass,
Stains the white radiance of eternity.

The application, indeed, is there a little different ; but Shelley has just the same thought of the disappearance of the "dead heavy mass" of the world of space and time. Keats, too, is translated to the "realm of true beauty."

He is portion of the loveliness
Which once he made more lovely ; he doth
bear
The part, while the one spirit's plastic stress
Sweeps through the dull dense world, compelling there
All new successions to the forms they wear !
Torturing the unwilling dross that checks its
flight
To its own likeness, as each mass may bear ;
And bursting in its beauty and its might
From trees, and beasts, and men, into the
heaven's light.

There are important differences, as the metaphysician would point out, between the two conceptions, and language of a similar kind might be found in innumerable writers before and since. I only infer that the two minds are proceeding, if one may say so, upon parallel lines. Fichte, like Shelley, was accused of atheism, and his language would, like Shelley's, be regarded by mere readers as an unfair appropriation of old words to new meanings. Shelley had of course no definite metaphysical system to set beside that of the German philosopher ; and had learnt what system he had rather from Plato than from Kant. It may also be called significant that Fichte finds the ultimate point of support in conscience or duty ; whereas, in Shelley's theory, duty seems to vanish, and the one ultimate reality to be rather love or the beautiful. But it would be pedantic to attempt the discovery of a definite system of opinion where there is really nothing but a certain intellectual tendency. One can only say that, somehow or other, Shelley sought comfort under his general sense that everything is but the baseless fabric of a vision, and

moreover a very uncomfortable vision, made up of pain, grief and the "unrest which men miscall delight," in the belief, or, if belief is too strong a word, the imagination of a transcendental and eternal world of absolute perfection, entirely beyond the influence of "chance, and death, and mutability." Intellectual beauty, to which he addresses one of his finest poems, is the most distinct name of the power which he worships. Thy light alone, he exclaims—

Thy light alone, like mist on mountains driven,
Or music by the night wind sent
Through strings of some still instrument,
Or moonlight on a midnight stream,
Gives peace and truth to life's unquiet dream.

In presence of such speculations, the ordinary mass of mankind will be content with declaring that the doctrine, if it can be called a doctrine, is totally unintelligible. The ideal world is upon this vein so hopelessly dissevered from the real, that it can give us no consolation. If life is a dream, the dream is the basis of all we know, and it is small comfort to proclaim its unreality. A truth existing all by itself in a transcendental vacuum entirely unrelated to all that we call fact, is a truth in which we can find very small comfort. And upon this matter, I have no desire to differ from the ordinary mass of mankind. In truth, Shelley's creed means only a vague longing, and must be passed through some more philosophical brain before it can become a fit topic for discussion.

But the fact of this unintelligibility is by itself an explanation of much of Shelley's poetical significance. When the excellent Godwin talked about perfectibility and the ultimate triumph of truth and justice, he was in no sort of hurry about it. He was a good deal annoyed when Malthus crushed his dreams, by recalling him to certain very essential conditions of earthly life. Godwin, he said in substance, had forgotten that human beings have got to find food and standing-room on a very limited planet, and to rear children to succeed them. Remove all restraints after the fashion proposed by Godwin, and they will be very soon brought to their senses by the hard pressure of starvation, misery, and vice. Godwin made a feeble ostensible reply, but, in practice, he was content to

adjourn the realization of his hopes for an indefinite period. Reason, he reflected, might be omnipotent, but he could not deny that it would take a long time to put forth its power. He had the strongest possible objections to any of those rough and ready modes of forcing men to be reasonable which had culminated in the revolution. So he gave up the trade of philosophising, and devoted himself to historical pursuits, and the preparation of wholesome literature for the infantile mind. To Shelley, no such calm abnegation of his old aims was possible. He continued to assert passionately his belief in the creed of his early youth; but it became daily more difficult to see how it was to be applied to the actual men of existence. He might hold in his poetic raptures that the dreams were the only realities, and the reality nothing but a dream; but he, like other people, was forced to become sensible to the ordinary conditions of mundane existence.

The really exquisite strain in Shelley's poetry is precisely that which corresponds to his dissatisfaction with his master's teaching. So long as Shelley is speaking simply as a disciple of Godwin, we may admire the melodious versification, the purity and fineness of his language, and the unfailing and, in its way, unrivalled beauty of his aerial pictures. But it is impossible to find much real satisfaction in the informing sentiment. The enthusiasm rings hollow, not as suggestive of insincerity, but of deficient substance and reality. Shelley was, in one aspect, a typical though a superlative example of a race of human beings, which has, it may be, no fault except the fault of being intolerable. Had he not been a poet (rather a bold hypothesis, it must be admitted), he would have been a most insufferable bore. He had a terrible affinity for the race of crotchet-mongers, the people who believe that the world is to be saved out of hand by vegetarianism, or female suffrage, or representation of minorities, the one-sided one-ideaed, shrill-voiced and irrepressible revolutionists. I say nothing against these particular nostrums, and still less against their advocates. I believe that bores are often the very salt of the earth, though I confess that the undiluted salt has for me a disagreeable and acrid savor. The devo-

tees of some of Shelley's pet theories have become much noisier than they were when the excellent Godwin ruled his little clique. It is impossible not to catch in Shelley's earlier poetry, in *Queen Mab* and in the *Revolt of Islam*, the apparent echo of much inexpressibly dreary rant which has deafened us from a thousand platforms. The language may be better ; the substance is much the same.

This, which to some readers is an annoyance, is to others a topic of extravagant eulogy. Not content with urging the undeniable truth that Shelley was a man of wide and generous sympathy, a detester of tyranny and a contemner of superstition, they speak of him as though he were both a leader of thought and a practical philanthropist. To make such a claim is virtually to expose him to an unfair test. It is simply ridiculous to demand from Shelley the kind of praise which we bestow upon the apostles of great principles in active life. What are we to say upon this hypothesis to the young gentleman who is amazed because vice and misery survive the revelations of Godwin, and whose reforming ardors are quenched—so far as any practical application goes—by the surprising experience that animosities fostered by the wrongs of centuries are not to be pacified by publishing a pamphlet or two about Equality, Justice, and Freedom, or by a month's speechification in Dublin ? If these were Shelley's claims upon our admiration, we should be justified in rejecting them with simple contempt, or we should have to give the sacred name of philanthropist to any reckless impulsive schoolboy who thinks his elders fools, and proclaims as a discovery the most vapid rant of his time. Admit that Shelley's zeal was as pure as you please, and that he cared less than nothing for money or vulgar comfort ; but it is absurd to bestow upon him the praise properly reserved for men whose whole lives have been a continuous sacrifice for the good of their fellows. Nor can I recognise anything really elevating in those portions of Shelley's poetry which embody this shallow declamation. It is not the passionate war-cry of a combatant in a deadly grapple with the forces of evil, but the wail of a dreamer who has never troubled himself to trans-

late the phrases into the language of fact. Measured by this—utterly inappropriate—standard, we should be apt to call Shelley a slight and feverish rebel against the inevitable, whose wrath is little more than the futile, though strangely melodious crackling of thorns.

To judge of Shelley in this mode would be to leave out of account precisely those qualities in which his unique excellence is most strikingly manifested. Shelley speaks, it is true, as a prophet ; but when he has reached his Pisgah, it turns out that the land of promise is by no means to be found upon this solid earth of ours, or definable by degrees of latitude and longitude, but is an unsubstantial phantasmagoria in the clouds. It is vain, too, that he declares that it is the true reality and that what we call a reality is a dream. The transcendental world is—if we may say so—not really the world of archetypal ideas, but a fabric spun from empty phrases. The more we look at it, the more clearly we recognise its origin ; it is the refracted vision of Godwin's prosaic system seen through an imaginative atmosphere. But that which is really admirable is, not the vision itself, but the pathetic sentiment caused by Shelley's faint recognition of its obstinate unsubstantiality. It is with this emotion that every man must sympathise in proportion as his intellectual aspirations dominate his lower passions. Forgetting all tiresome crotchets and vapid platitudes, we may be touched, almost in proportion to our own elevation of mind, by the unsatisfied yearning for which Shelley has found such manifold and harmonious utterance. There are moods in which every sensitive and philanthropic nature groans under the

heavy and the weary weight
Of all this unintelligible world.

Whatever our ideal may be, whatever the goal to which we hope to see mankind approximate, our spirits must often flag with a sense of our personal insignificance, and of the appalling dead weight of multiform impediments which crushes the vital energies of the world, like Etna lying upon the Titan. This despair of finding any embodiment for his own ideal, of bridging over the great

gulf fixed between the actual world of sin, and sorrow, and stupidity, and the transcendental world of joy, love, and pure reason, represents the final outcome of Shelley's imperfect philosophy, and gives the theme of his most exquisite poetry. The doctrine symbolised in the *Alastor* by the history of the poet who has seen in vision a form of perfect beauty, and dies in despair of ever finding it upon earth (he seems, poor man! to have looked for it somewhere in the neighborhood of Afghanistan), is the clue to the history of his own intellectual life. He is happiest when he can get away from the world altogether into a vague region, having no particular relation to time or space; to the valleys haunted by the nymphs in the *Prometheus*; or the mystic island in the *Epicyschidion*, where all sights and sounds are as the background of a happy dream, fitting symbols of sentiments too impalpable to be fairly grasped in language; or that "calm and blooming cove" of the lines in the Euganean hills.

The lyrics which we all know more or less by heart are but so many different modes of giving utterance to—

The desire of the moth for the star,
Of the night for the morrow,
The devotion to something afar
From the sphere of our sorrow.

He is always dwelling upon the melancholy doctrine expressed in his last poem

by the phrase that God has made good and the means of good irreconcilable. The song of the skylark suggests to him that we are doomed to "look before and after," and to "pine for what is not." Our sweetest songs (how should it be otherwise?) are those which tell of saddest thought. The wild commotion in sea, sky, and earth, which heralds the approach of the south-west wind, harmonizes with his dispirited restlessness, and he has to seek refuge in the vague hope that his thoughts, cast abroad at random like the leaves and clouds, may somehow be prophetic of a magical transformation of the world. His most enduring poetry is, in one way or other, a continuous comment upon the famous saying in *Julian and Maddalo*, suggested by the sight of his fellow-Utopian, whose mind has been driven into madness by an uncongenial world.

Most wretched men
Are cradled into poetry by wrong;
They learn in suffering what they teach in song.

Some poets suffer under evils of a more tangible kind than those which tormented Shelley; and some find a more satisfactory mode of escape from the sorrows which beset a sensitive nature. But the special beauty of Shelley's poetry is so far due to the fact that we feel it to be the voice of a pure and lofty nature, however crude may have been the form taken by some of his unreal inspiration.

—*Cornhill Magazine*.

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A CREMATION IN CHINA.

BY HERBERT A. GILES.

IN the great city of Canton are many and extensive places of worship dedicated to the religion of Buddha, the well-honored one; but none more worthy a visit than the "Ocean Banner" monastery, which stands hard by on the little island of Honam, its portals laved by the muddy waters of the Pearl river. At no great distance, on the opposite bank, once stood the celebrated foreign "factories,"* where the pioneers of European commerce dragged out so many weary hours of *ennui* and danger, to be reward-

ed in most cases with those ample fortunes which are even now inseparably connected with the name of a China merchant. All this has of late years undergone a change. On the Canton side of the river, in close communication with the teeming suburbs of the city itself, has been formed, upon what was not long ago only a mud-bank, a beautiful park-like settlement, with handsome European houses scattered here and there among the trees, a public garden, a church, a club, a theatre, a racquet-court, a lawn-tennis and croquet-ground, and other striking proofs of an advanced civilisation. Residents who tire of the

* So called from their being the residence of factors, or agents of the East India Company.

endless monotony of each other's faces, stroll away unmolested into the crush and bustle of the native town, where a new phase of humanity presents itself at every turn to the eye of the observing student. If they only conduct themselves there with becoming propriety, resisting impulses to kick each "dirty coolie" out of their path, and attempting to fall in with rather than ignore the exigencies of Chinese street etiquette, they may wander from morn to dewy eve far into the labyrinth of lanes of which this city is composed, without the risk of even a bad word being hurled at their unoffending heads.

We landed, on the afternoon of the 27th January last, at the jetty of the Ocean Banner monastery ; and, passing through the entrance gate, proceeded up a broad granite pathway, shaded on both sides with trees. Vice-Admiral Hillyar, C.B., and several of his staff were availing themselves of the opportunity of visiting this temple ; in consequence of which we were soon surrounded by an unusually large crowd of excited children, all anxious to have a good stare at the red-haired barbarian. The promise of a cumshaw* readily enlisted two of the most turbulent youngsters into our own service, and by their aid we were enabled to advance with more rapidity than we could otherwise have done. In a few moments we had reached a kind of open gateway or porch, within which were two enormous figures, one on each side, the doorkeepers of the place. The figure on the right wore a benignant smile of welcome, while his colleague opposite looked scowlingly down on us, as if to warn us against misbehavior of any kind within the sacred precincts. "No smoking" was placarded close by in large characters ; also a prohibition against eating ground-nuts, but neither seemed to be heeded by the people, nay, several of the priests themselves were very willing to accept a proffered cigar. A little farther on was another and a larger gateway, containing images of the four heavenly kings,† whose duty it is to guard the world from the attacks of Titanic demons known as Asuras. Their faces are col-

ored green, red, white, and black respectively ; and over their huge legs and bodies are pasted little strips of red paper, recording the names of little children confided by their anxious mothers to the protection of these deities. Beyond this gateway stands the first great *sanctum*, containing colossal images of the so-called past, present, and future Buddhas* —the Buddhist Trinity. A priest, dressed in a light drab robe folded across his breast in the form of a cross, dirty and degraded-looking as usual, half opened one of the side doors, and in we pressed as hurriedly as we could, the priest slamming the door in the face of the crowd outside, minus the few more nimble than the rest who had managed to squeeze in with us. On each side of the Three Precious Ones were ranged smaller images of the eighteen Lo-han,† or chosen disciples of Shâkyamuni Buddha ; long scrolls of ornamental design, inscribed with the formula *Namah Amitâbha*,‡ hung from the roof in all directions, the gifts of wealthy suppliants whose prayers had been heard ; and in one corner was a magnificent bell, some two hundred years old, which is struck morning and evening one hundred and eight times with a kind of battering-ram suspended at its side. A ten-cent piece amply satisfied the priests in charge of this hall, and we passed on without delay to the second, in which stood a splendid marble dagoba, said to be hewn from a single block and covering as usual some precious relic of Buddha. At each of the four sides stands a wooden table covered with flowers, candles, incense, &c., the instrumental parts of the Buddhist as well as of the Roman Catholic religion. On one ledge of the dagoba itself was placed a bowl of water, the emblem of purity as set forth in the life and teachings of Buddha, in no way corresponding, as has sometimes been stated, to the *eau bénite* of the Romish Church. Behind this, again, is the hall of Kuan-yin, the Chinese goddess of mercy, and the Avalôkitê'svara of Indian Buddhism. We take a hasty glance at the "sacred" pigs and cocks which are kept in the monastery in illustration of the great

* The Anglo-Chinese equivalent of "bak-shesh," being a corruption of two Chinese words meaning "grateful thanks."

† The Tchaturmahârâdjas.

* Shâkyamuni, Avalôkitê'svara (or Kwan-yin), and Mâitrêya.

† Same as *Arhân*.

‡ "Our humble trust is in Amida Buddha."

Buddhist commandment, "Thou shalt not take life," and prepared to examine into the more interesting details of the Buddhist cloister, inserting by way of preface a few desultory remarks on the social status of the monks themselves.

The ranks of the Buddhist priesthood in China are generally recruited by children, purchased either from their parents or from kidnappers. It is only in times of great distress that the poorer Chinese will sell even their daughters, still less the valued son on whom may possibly devolve the paramount duty of conducting the ancestral worship; kidnapping, however, is by no means an uncommon crime, albeit the punishment on detection is a speedy and ignominious death. Occasionally, parents dedicate a child to Buddha, perhaps in fulfilment of a vow; and the victim is there and then formally made over to the Church, by deeds signed, sealed, and delivered. From this step there is no withdrawal. The child's head is completely shaved; he is made to live on a vegetable diet and to forego the use of wine. He is taught to chant the Buddhist liturgies, without understanding a word of them; and after a required novitiate, proves his constancy to the faith by standing unmoved while several pastilles burn down into his scalp, leaving the ineradicable scars which testify to the fact that he has put away for ever the things of this world and has been regularly ordained as a priest. He has now "left his home"** in good earnest, and all that remains to him in this world is a life of celibacy and dull routine. To resume: criminals fleeing from justice not unfrequently seek refuge in a religious life, submitting to the branding of their heads and the subsequent discomforts of cloister existence rather than fall into the merciless meshes of Chinese law.† Sometimes, too, unsuccessful mandarins throw themselves into a monastery and take the vows, driven to such a step by dread of the Imperial frown. It is said that the foolish official who, during the war of 1841-42, laid at the foot of

the Throne his discovery of the secret of foreign steamers, and forthwith produced a vessel with two huge paddle-wheels to be turned by coolies inside, is even now languishing in one of the numerous monasteries on the celebrated Lo-fou hill in the province of Kuang-tung, whither he retired after the failure of his scheme, covered with ignominy and shame.* From such sources as these come the priests of Buddhism in China, renouncing all ties of home and kindred for a life of celibacy, fasting, and prayer, its monotony occasionally broken by some violent act of self-sacrifice with a view to obtaining alms, such as sitting in a box studded on the inside with nails and only pulling one out each time a charitable passer-by sees fit to shorten the penance by handing in a contribution to the funds of the house. Besides the regular masses in their own temple, the priests attend at people's houses to read a service over the dead. Taoism divides with Buddhism the patronage of the illiterate; some send for Taoist priests, some for Buddhist; many make doubly sure by calling in the aid of both. In every monastery there are several who smoke opium; a few are sincere; all are dirty and brutish-looking to the last degree. The people tell sad stories of their oft-broken vows and generally irreligious demeanor—a portion of which must be set down to the scandal that usually gathers round a class professing to be better than the world in general, but much of which has indubitably a foundation of truth. In any case, the reputation of the Buddhist priest is a by-word among the Chinese, whose superstitious nature forbids them at the same time to dispense altogether with the services of these despised creatures, who are not classified as ordinary men. They have no home, no country, no ancestors, and no posterity. They have not even a name; only a monastic appellation, by which they are distinguished one from another.

* The Chinese equivalent of our "gone into the Church."

† A very amusing story of this kind is told in one of the early chapters of the well-known *Shui-hu*. The criminal in question gets horribly drunk and beats his brother priests right and left, &c., &c.

* It may be interesting to some of our readers to learn that at this very moment there is a line of passenger-boats running between Canton and a town some ten or fifteen miles off, which are propelled by side wheels turned by about twenty coolies, who work exactly as if they were on the treadmill. These boats may frequently be seen passing up and down the river, and make very good way even against the tide.

We had now arrived at the refectory, where the priests take their daily meals of vegetables and rice, lenten fare being their only portion from one year's end to another. "No wine or meat may enter here," says a placard at the gate of the temple; and whatever may be the forbidden dainties in which the brothers indulge beyond the limits of the cloister or in their own private apartments, it is quite certain that here before the eyes of the public the commandments of Buddha are in no way infringed. The refectory is a large airy room open at one end, with a railing across to keep out strangers. At the opposite end is a small table for the abbot, so to speak, raised on a dais about a foot high, from which position he can see the faces of all the priests as they sit on one side only of the long narrow tables ranged on the right and left of the hall. The latter are not supposed to talk during meals;* they are expected to act in accordance with a couplet, one among several which we copied down from the pillars on which they hung:—

Reverence the statutes of purification (by fasting):

Pay strict attention to the rules of decorum.

In unoccupied moments they should meditate upon some passage from the *sūtras*, such as may be seen in large characters hanging from every wall. In one corner there is a table laid for mendicant or travelling priests, any of whom are entitled to three days' entertainment, provided they can show their diploma of ordination, sealed by the proper authorities. Just outside the refectory railings is a peg in the wall, and over it the inscription "Lost Property." On this each member of the fraternity is supposed to hang anything he may find lying about, part of a priest's dress, or any of the various implements used in their religious ceremonies. We now inspected the abbot's quarters and the loathsome dens which serve as sleeping apartments for the monks; and we were then shown into a

section of the monastery connected more closely with the subject of the present paper. It is known as the "Abode of a Long Old Age," and consists of a suite of rooms specially set apart for aged or infirm priests, or such as are stricken with any mortal disease. We entered in by the "front" gate, or Gate of Life, as opposed to the "back" gate, or Gate of Death, which last is opened only on the occasion of a priest's demise, for this exit of his dead body. In the middle of the building is a small chapel, dedicated to the God of Medicine, and from a scroll overhead we learnt that this was the "Hall of the Centenarian's Repose." Around were the usual narrow bedchambers of the priests, and at one side was a small cooking-range for the preparation of their food. Three old brothers were living in this dismal place, quietly awaiting the hour of translation to a higher state. They detest, naturally enough, an enforced residence in this "Abode of a Long Old Age;" when once the abbot's fiat has been pronounced, however, there is nothing left for them but to obey. We now passed across to a room situated opposite to the gates of life and death, where we were to view the large wooden boxes containing wooden chairs in which dead priests are placed on the day of their death, previous to the final act of cremation; and we were just about to raise the vertical slide of one of these, when the conducting priest seized us by the sleeve and whispered hurriedly, "St! st! there's one inside!" And immediately we saw, what we might have noticed before, that a narrow slip of yellow paper, bearing certain characters upon its face, was pasted on the slide of the box, and that a table was arranged in front with several plates of food, &c., and a taper burning at the side. On asking particulars from our friendly guide, we learnt that the dead man had passed away in the night, and that he was to be cremated at eight o'clock on the following morning. An offer of two ten-cent pieces induced our informant to raise the vertical slide; and on looking in, we beheld an old man sitting bolt upright and dressed in the usual priestly garb, his hands folded before him in prayer, and his head thrown slightly back, as if he had fallen asleep. Only by the hue on his face could we have told that he was

* "When they enter the refectory their demeanor is grave and orderly: they sit down in regular order; they all keep silence; they make no noise with their bowls, &c.; and when the attendants serve more food they do not call out to each other, but make signs with their hands."—*Record of the Buddhistic Kingdoms*, ch. iii. [By the present writer.]

really dead. Before him, fixed in the framework of the chair itself, was a short upright piece of wood with a crescent-shaped top, intended to serve as a rest for the chin in case his head should fall forward. What we had seen suggested a project we determined to carry out ; we moved away at once, not wishing to give the impression that we proposed to be present at the ceremony of the morrow, lest the priests should take alarm at the prospect of having foreigners among their spectators, and so hurry the performance over before our arrival. We did not even stay to copy the inscription on the coffin, but strolled away through the monastery grounds in an unconcerned manner.

We got up next morning in the cold, grey dawn of a January day, and after an early breakfast rowed quietly down to the jetty of the Ocean Banner monastery. To our great satisfaction but few children were about, and we passed quickly and noiselessly through the dark cloisters, until we reached the "Abode of a Long Old Age," arriving there about a quarter of an hour before the appointed time. And now we had ample leisure to make a further inspection of the coffin and its occupant, a liberty resolutely opposed by a priest we found in attendance. He said that the last mass had been chanted for his dead brother's soul, and that no man might look on his face again unless through the flames which were to waft him into Nirvâna. We contented ourselves, therefore, by noting down that above the box and altar were two Chinese characters, signifying that the priest within was on his return journey to the west, to the land of Buddha ; in other words, that he was dead. On each side hung a scroll, on which were written the following words :—

(1) "Though the Trikâya* be absolutely complete, the limit is not yet found."

(2) "It is the maturity of the Skandha † which alone can give perfection."

* The three bodies, namely, *Dharmakâya*, or the spiritual body, which is permanent and indestructible ; *Sambhûgakâya*, or the form which belongs to every Buddha as a reward for his merits, and is in due accordance therewith ; and *Nirñnakâya*, or a body which has the power of assuming any shape for the purpose of propagating the doctrines of Buddhism. See Eitel's *Handbook of Buddhism*.

† Five attributes of every human being,

The yellow strip of paper pasted on to the vertical slide above mentioned bore this inscription :—"The throne of intelligence* of the contemplative philosopher, the Bôdhisattva,† the worthy Bikshu ‡ 'United Wisdom,'§ now passed away." While thus engaged we heard the harsh tones of the "wooden fish," || beaten to summon the priests to their morning meal, and about a quarter of an hour afterwards they began one by one to drop in, each with his *kachâya* or colored stole hanging in readiness over one arm. Then ensued a series of prostrations on the circular rush mat placed in front of the altar and coffin ; and every now and again some friendly hand would renovate the wick of the flickering lamp, that the spirit of the dead man might the better see to eat the food there laid out to comfort its hungry stomach. But these were merely private manifestations of feeling, and had nothing to do with the real ceremony of the day ; and while not thus engaged, the priests, now collecting in large numbers, examined as usual the texture of our clothes, and asked a few of the well-known questions. One of them had only recently returned from a visit to Lhassa, the capital of Tibet, and the stronghold of that form of the Buddhist religion known as Lamaism. He said the Lamas had no wish to see foreigners there, and advised us strongly not to go, adding that there was no such trade as we had at Canton to attract us thither. Just at that moment it was announced that the abbot was coming ; and immediately all the priests put on their stoles, and arranged themselves decorously in two long rows, beginning from close alongside the coffin itself. In a few minutes the abbot was passing slowly between their ranks, his string of

namely :—Form, perception, consciousness, action, and knowledge. "The union of these five attributes, which are considered as abstract qualities, and yet as forming the real constituents of every personality, dates from the moment of birth. Their full maturity brings on death."—Dr. E. J. Eitel.

* Bôdhi.

† A being that has only once more to pass through human existence before it attains to Buddhahood.

‡ A priest or follower of Shâkyamuni.

§ The dead man's "monastic appellation" mentioned above.

|| A piece of wood carved in the shape of a large-headed fish with a very wide mouth.

108 beads* in one hand, and in the other a small gong fixed into a framework of wood, having a clapper so attached that every turn of the hand produces a sound. He stopped in front of the altar and coffin, and there prostrated himself thrice, each time knocking his head upon the ground thrice, that being the number of *kotows* performed before the Emperor of China, in the presence of Death, and on other special occasions. He then rose, and at a given signal the whole body of priests broke forth into a chant or intonation of that portion of the Buddhist liturgy set apart as the service for the dead, the abbot himself adding to the general effect by a stroke every now and then upon his little hand-gong. When this was over, two little ragged boys were chosen from among the now fast-increasing crowd, of whom to each was confided a streaming banner attached to the top of a light rod, ornamented with a blue and white spiral from top to bottom. Both banners bore the same legend :—“Our humble trust is in Amida Buddha, our guide.” These two boys were told off to head the procession ; and then four priests, whose special duty it is, seized the box which held the dead man and bound it to a couple of stout bamboo poles, by the aid of which they carried it very comfortably and gently between them, without any of the jogging so hateful to Chinese sentiment. Following close upon the banners, the coffin-bearers themselves were followed by all the priests, walking two-and-two, and headed by the abbot, the whole company chanting in admirable time the words *Namah Amitabha*—“We humbly trust in Amida Buddha.” A scuffling troop of idlers and children brought up our disorderly rear ; and thus we passed along, before the “Gate of Death,” through which the body of the priest had been carried two nights previously, and up the *Via Mortis*, or “Way of Death,” a small lane leading from the old men’s quarters to the cremation-ground of the monastery, never used except upon such occasions as the present. On our way through the garden in which this lane terminated, we observed a black marble tablet standing in a little kiosque by the

side of the path. This had been put up in memory of a white deer which had been presented to the monastery by a former Prefect of Canton, celebrated as being long a favorite with the son of its old master, and because on the very day on which the boy was subsequently cut off in the flower of his youth the affectionate creature laid down its head and died too—they said, of a broken heart. We passed two of the substantial stone mausoleums into which are thrown, tied up in red bags, the collected ashes of cremated priests ; but these are no longer in use, each having already received its full complement of 5,048 bags, and the little square port-holes at the side have been bricked up for the last time. Meanwhile, such remains of charred bones as are now gathered together after every cremation are reverently deposited in small urns and piled in a temporary shed, with a slip of paper or memorandum attached to each, until sufficient money can be scraped together for the building of a new mausoleum. We had now arrived in front of the furnace, a low brick building, quite open on one side, and with apertures in two of the other three, for the purpose, we presume, of creating a proper draught. Within was already prepared a funeral pyre consisting of billets of thick wood, and on the top of these the coffin was placed ready for the fire. The priests ranged themselves in the form of a horse-shoe before the opening of the furnace, and once more began to chant some passage from their sacred books ; and it was not until some ten minutes had elapsed that a novice lighted a long-handled torch and handed it respectfully to the abbot. The latter then stepped forward to a position immediately in front of the furnace, and there he slowly waved the torch several times round and round, uttering at the same time an invocation to Buddha and all the saints on behalf of the dead man’s soul. While this was going on, the novice had crept into the furnace ; and after gently raising the upper lid of the box, was busily engaged in inserting therein pieces of wood, apparently well oiled, together with other combustible material. By the time the abbot had finished his prayer, everything was in readiness ; he then handed the torch back to the novice, who forthwith placed

* Said to refer to the 108 compartments in the *phrabat*, or sacred footprint of Buddha.

it below the pyre, where oil had evidently been poured over the dry twigs used for lighting the fire. In a moment arose a blaze, and the flames began almost instantaneously to roar fiercely upwards, devouring the thin planks of the box in which the dead man was sitting. This was the signal for departure. One by one the priests stole away, not caring to participate too closely in the last scene of all, until at length only a few were left

behind to collect with pious hands the *shé-li** of their departed brother. In less than two hours the fire had burnt itself out. The earthly remains of "United Wisdom" were placed in the customary urn, and deposited in the temporary mausoleum; while his immortal soul had soared aloft to the promised land, there to partake of the infinite beatitude of Nirvâna.—*Cornhill Magazine*.

ON THE MIGRATION OF BIRDS.

BY DR. AUGUST WEISSMANN.

THE ancients were wont to study the flight of birds for purposes widely different from ours of to-day. To the old augurs the course of the eagle from left to right, or from right to left, was an omen in the one case of good, in the other of evil fortune.

We of the modern world are more modest. We do not demand that the flight of birds shall be regulated according to our interests, nor seek in their winged wanderings a sign from the gods.

The flight of birds is still a subject of interest to us, not because we expect to find in it a key to the enigma of our own lives, but because we venture to hope it may yield us some clue to the great enigma of Nature, and that, by a careful investigation of the causes which determine the migration of birds, we may get a deeper insight into the workings of Nature, not only in relation to this isolated phenomenon, but to the existence and meaning of marvellous appearances which organic life presents in every direction.

It is not of the flight of birds generally that I intend to speak here, but only of that particular and regularly recurring form of it known as the passage or migration of birds.

The phenomenon itself is a perfectly familiar one, and can scarcely have escaped the observation even of a child. Who has not seen the dark cloud of starlings circling in mid-air around his head, then suddenly dropping down upon the fields; or the flocks of snow geese soaring so high in the heavens that only a keen eye can detect them, and

they might pass unnoticed but for the distant cackling that falls upon the ear?

Few of us may have had the opportunity of ourselves seeing how the storks at the end of July gather by hundreds on a marshy meadow, in order to set out, all together and in regular order, for the journey to their winter quarters; but this curious scene is very familiar to us by description, and we all have a general idea whither it is that the storks wend their flight. They take a long journey, going far into the interior of Africa, at least as far as the Equator. It is not yet positively known in what districts of Africa they winter. Brehm observed them in Eastern Sudan, in September, still on the wing, and in such numbers that they "literally covered the broad level lands by the river side, and, when they rose, filled the whole horizon." The stork does not winter in the south of Europe, so that the North German stork, for example, must make an extraordinarily long journey to reach his winter quarters, and this journey he accomplishes in a few days. He never halts except to take necessary food, but wings on steadily his unbroken flight.

While, however, the migration of birds is thus familiar to us in its outward aspect, it is quite otherwise when we come to investigate the causes of the phenomenon. To the popular mind this is a complete mystery, and even science is far from having reached a satisfactory solution of it. Important ad-

* The *s'arira*, or relics, of the body of any cremated saint.

vances have, however, been made in this direction during late years, partly through the accumulation of careful observations, but chiefly through the adoption of new methods of investigation ; and we may now say, that though some information as to details is still wanting, yet in its general principles the phenomenon of the migration of birds is now capable of explanation.

The first question which arises in relation to this curious natural fact of course is : Why do the birds migrate ?

Have they an innate restlessness which will not allow them to settle long on one spot, but compels them to wander hither and thither over the surface of the earth ? In many even scientific books of natural history, this restless impulse, this wandering instinct, is assigned as the cause of the migration of birds. In a certain sense, as we shall presently see, this is quite true ; but this answer to the question gives really no explanation of the phenomenon, it merely removes it a step further ; for we immediately ask, whence comes, then, this wandering instinct ? Why do we find it in some birds and not in others ? is it of any use to those which possess it ? is it, indeed, a necessity of their very existence ?

Let us fix our attention first upon this last question, and endeavor to answer it by another. What would become of the birds which make their home with us in summer, but in the winter go " flying, flying south," if we could take away from them the wandering instinct, and so compel them to winter in our climes ?

The answer is, they would perish, not from cold, but from want of food. How could the storks live in our countries in winter, when their chief supplies—frogs, lizards, and blind-worms—lie buried in their winter sleep ? when they could not, in default of these dainty bits, make a snap at bees, humble-bees, or grasshoppers, or find a meal of young birds as they so often do in summer ? And even if in a mild winter, a single stork could—as it has been known to do—pick up a meagre subsistence, just enough to sustain life, how would this scanty supply suffice for the multitude of birds that inhabit the same district in summer ?

Still worse would it fare with our

numerous insect-eating birds, the nightingale and white-throat, the redbreast and the swallow. The cuckoo, too, would inevitably die of hunger if he were to attempt to stay through our winter, for his food consists almost entirely of caterpillars, especially the large hairy kind, of which he devours great quantities. These, however, enter the pupa-stage in July or August, in places where the cuckoo cannot get at them, or they bury themselves in the earth for the winter. The cuckoo therefore leaves us in August, while the small insect-eaters, such as the white-throat, the redstarts, and the siskin, stay until September, as they can still find among the garden shrubs, and in hedges, and the fields, worms and insects enough to live upon.

There are, indeed, insect-eating birds which remain for the winter, but these, like the blackbird and the thrushes, either feed upon berries, or if they are purely insectivorous, like the woodpeckers, they possess particular natural appliances, by which they can gain access to their food even in winter.

Thus the woodpeckers feed chiefly on insects which perforate trees. And as these are tolerably abundant, and within the stems are completely sheltered from the cold, they are to be found in winter as in summer. The woodpecker is indeed a real carpenter. With his hard and strong beak he works away at any unsound spot in the trunk of the tree, till he reaches the fresh wood. The largest of our species, the black woodpecker, has been known to split off chips six inches in length, and under a tree in which a bird of this kind has made itself, with all the precision of a carpenter, a home in the trunk, the chips lie scattered about in such numbers that they alone indicate the presence of the nest. Although even for the woodpecker food is much more abundant in summer, since he consumes all the insects that live under the bark of the tree, still his winter supply never entirely fails ; he always finds in the wood the fat larvae of the wood-wasp and wood-beetle, so that he is under no necessity to change his abode. Hence he abides and is not a migratory but a resident bird.

We see then that only those birds have the migratory instinct which in winter

could not sustain life without it in the countries where they pass the summer.

The next question that naturally presents itself is: Why should they do this? why should they come to us in summer if they are obliged to leave again in winter? why do they not rather remain in those southern lands which would yield them an abundant supply of food even in winter?

The answer to this is not so easy as it might seem; at any rate it is not so simple as that to the previous question: Why do they leave us in winter?

I shall confine myself for the present to two leading considerations.

The first is that no possibility of life in nature remains unused. Wherever the outward conditions for the existence of a living being are favorable, there for the most part we find life. Every species strives to multiply itself indefinitely; hundreds of thousands are born every year, but far more than half of these perish early because there is not room for all. So long as any country remains unpeopled with bird-life, in which such life might be generally maintained, so surely will the unoccupied ground be quickly taken into possession.

It would be a great mistake moreover to suppose that northerly lands, especially the Arctic regions, offer their winged summer guests but scanty supplies. On the contrary, when the flocks of geese, swans, gulls, sandpipers, &c., which breed there, return in the autumn, they are in remarkably good condition, and have a thick layer of fat under their skin, to the annoyance of the collector, who finds the skinning of his booty perceptibly harder on that account. The Arctic Sea is prolific in the lower animals of every description, as is shown by the extraordinary number of birds which breed on the shores of the frozen sea. We can understand then how even these regions have their bird colonists.

There is a second consideration which accounts also for the northerly flight of the birds in summer.

It is generally imagined that tropical countries have all the year round an abundant supply of food of all sorts, both for animal and vegetable life. This is true, however, only of certain regions; for the most part it is altogether a mistake. In the interior of Africa

whole districts of country are completely dried up; all standing waters and most running streams disappear; frogs, newts, lizards, and snakes, as well as many fishes, bury themselves in the mud, and there take their summer sleep; and even the insects disappear as a body, when the green of the plants is parched by the burning heat, and all verdure withers.

At such seasons even birds cannot exist. Food fails for all which, like the little warblers and the cuckoo, live entirely on insects, or, like most of the waders and water birds, feed only on aquatic animals, snails, mussels, and worms.

We may go further, and say that even for many herbivorous birds existence would be impossible, as for example for the crane. This large, handsome, graceful bird lives for the most part on grain and fresh plants. In Eastern Africa, where it winters in large numbers, it plunders the fields of millet on the plains. But in summer these plains, like most of the southern edge of the Desert of Sahara, are completely dried up. Hence there is here again an obvious necessity for the birds to seek other climes.

It appears then plain that the migrations of birds are not capricious, or prompted by mere restless impulse; they migrate because they are obliged to do so in order to maintain life; they migrate that they may not starve.

We do not of course mean by this that the individual bird, as we see him today, is driven away by the fear of hunger in the autumn; nor do we mean that the bird would wait till all supplies failed, and he began to feel the pinches of want. What we mean is that there is an impulse within him which constrains him at the right time to migrate; and if we wish to understand the whole philosophy of this phenomenon, we must seek an answer to the further question: Whence comes this wandering instinct in the birds? What is its origin, and what are the stages of its development?

As we have seen that only those birds have this impulse which are liable to a periodical dearth of food, we may naturally suppose that the wandering instinct may have been developed by the period-

ically recurring scarcity. This is indeed the fact, as the following considerations will show.

We must turn our attention first to those birds which are not strictly migratory, for if we began with the swallow and the crane, we should be driven back on the first question: How did these birds know that at a distance of hundreds of miles lay a country where they could meet with plentiful sustenance, when for the first time they found their food growing scarce at the beginning of winter? and why did they fly such an immense distance, without breaking the journey at any of the many halting-places where they might have found, at least for the time, abundance of food?

The whole question would thus be prejudiced; for in inquiring into the cause of a phenomenon, it is not fair to begin with the investigation of extreme cases, but, on the contrary, with those which approach most nearly to ordinary and familiar facts. We must not therefore, in endeavoring to ascertain the origin of the migration of birds, take as examples the enormous flights of the crane and stork, but must rather ask whether the habit of migration does not show itself in other species in a less marked degree, so that we might be in a position to regard these extreme forms as merely fuller developments of the same instinct, and thus rise from simple and familiar instances to an intelligent appreciation of the whole phenomenon.

This we find to be quite feasible practically.

With respect to the varying fixity of their habitat, birds have been somewhat roughly arranged under three grand divisions, as Resident, Wandering, and Migratory.

The first class comprehends the wood and black grouse, pheasant, sparrows, and titmice, and all those birds whose habit it is not to leave the place where they have once found a home. To the residents belongs also, as I said before, the black woodpecker. This bird inhabits in summer and winter the same forest tract. But even he shows the first tendency towards the wandering instinct, for in winter he extends his flight through the dark pine forest much further than in summer, and for the simple reason that his food is

more scarce, and that he has to take a wider range to find it. In summer every tree-trunk yields him an abundant supply; in winter he has to go hither and thither tapping the hollow wood, till he finds his food. Here, however, we have clearly the first rudiment of the migratory instinct. We have only to imagine such a bird inhabiting a very small and isolated woodland tract, and it is plain that at the approach of winter he would be compelled to leave this and to fly in search of food to the nearest forest, and when this was again exhausted to seek out another; and thus from time to time the cravings of hunger would make him a wandering bird. In this sense not only the black woodpecker, but many others of his tribe, are also wandering birds.

Thus, for example, the beautiful green woodpecker with the red cap, which usually inhabits small leafy forests, only remains in one and the same place during the breeding season. As soon as the young are fledged he begins his wanderings, and takes up his temporary abode sometimes in forests, sometimes in gardens, and often, in the scarce time of winter, extends his flight to districts where he is never seen at any other time. As bearing on the question now before us, it is important to note that these wanderings are not regulated by any fixed rule; the bird is obviously guided by the necessities of the moment. When food fails him in one place, he flies on and settles somewhere else; and in very mild winters, when food is plentiful, he does not wander at all, but remains in his summer breeding-place.

One and the same species is, therefore, at one time a wandering and at another a resident bird; and there can be no doubt that the habit of wandering may be developed in the resident bird, by the mere necessity of flying in search of food, and that it must have been so developed whenever a species passed from a warmer to colonize a colder climate.

In such a case, certain individuals must first have been obliged to wander about in search of food in winter; as this necessity recurred year after year, the habit would gradually grow; and the individual would act upon it, not only under stress of bitter weather, but

also in mild winters, when it might very possibly have sustained life in its summer habitat.

Now we know that habits are hereditary, no less than physical peculiarities. They are handed down from one generation to another, and are the more certain to reappear when they are actually a condition of the maintenance of life in the individual. A green woodpecker, for instance, which should fail to adopt this habit, would in hard winters simply perish for want of food. Thus with each successive generation, the impulse to wander in winter must have become stronger, and must have grown finally into an irresistible instinct urging each bird to flight at the approach of winter.

This impulse clearly differs only in degree, not in kind, from that which urges the regular migratory birds to their more distant flight. The new feature of the phenomenon which we observe in their case is, that the flight is always in one definite direction.

To the woodpecker it is indifferent whether he flies in search of his winter sustenance ; he finds his wood-worms everywhere, in north or south alike. But this is not the case with all wandering birds. If we turn our attention to those which live in winter on the berries in the forests, on bilberries or juniper berries, we shall find that a northerly flight in winter would be of little advantage to them, for deep snow, such as covers the ground in the north of Europe, would completely hide the greater part of their sustenance. Nor is it only on account of the depth of the snow, and the stunted growth of the bushes and trees, that birds like the waxwing and the fieldfare could not winter in high latitudes. The greatest obstacle of all would be the shortness of the days, which would allow so few hours for the search for food. It is clear, then, that if such birds are not to perish, they must seek their winter sustenance in a generally southerly direction.

Here it may be fairly urged that we have not yet shown how the habit of migrating southwards was first formed. The waxwing, for example, which now inhabits in summer the north of Russia, must first have wandered there. How then did the bird know that in winter it must not wend its flight north, or east,

or west, but in a southerly direction in order to avoid the deepest snow ? We have seen how the wanderings of the green woodpecker gradually grew into a fixed habit, but how came waxwings to learn that in winter they must fly south ? how did they know that in southerly lands they would find longer days and more plentiful food ? Twenty years ago we could have given no answer to this question. To-day we are prepared with one, because we have become acquainted with a principle not previously recognized, and which has a powerful influence on all the relations of life, determining and regulating them—the principle of natural selection.

Let us suppose, for example, that the waxwing had not yet become an inhabitant of Russia, but was living winter and summer alike in Germany, slowly multiplying, and therefore gradually extending its range further north.

Now we will imagine a flock of these birds to have colonized further north. In the very first winter they would find their food becoming scarce, and would be compelled to wander about in search of it ; in this way many birds would perish, all, that is to say, which had taken a wrong direction. Only those which, whether by accident or by remembering the way they had come, took a southerly course would have any prospect of outliving the winter.

In each succeeding winter, therefore, a selection would take place among the northern colonists, and only those would remain alive which had migrated southward. As these alone would remain to propagate in the next year, this habit of a southerly flight would be transmitted to their descendants, and so a race would arise predisposed by habit not to wander hither and thither in winter, like the green woodpecker, but to take one definite direction, namely, towards the south. This brings us, then, to the migratory birds proper.

Among these there are indeed various classes. Between the somewhat irregular southerly flight of the waxwing, and the rapid and perfectly regular migration of the crane or snow goose, there are many gradations. They are, however, only differences of degree which divide the regular from the irregular migratory birds ; they are all steps in

the same scale, and help to connect the two extremes. We can indeed see at once the causes which have produced in certain species a fuller development of the migratory habit. One such cause is to be found not only in the regularity of the migration, but in the great distance that is traversed in long stretches of unbroken flight.

Let us take, for example, a species of duck living in the south of France in ponds and marshes, and subsisting chiefly on mussels, snails, worms, and the larvae of insects, which it finds on the water-plants as well as on the surface of the pools. Such is, in fact, the mode of life of most ducks.

This duck, having found a good breeding-place, will remain there summer and winter. It will never be driven elsewhere by lack of food, for in a climate where there is only for a very short time of the year a thin covering of ice, animals can always find sufficient supplies.

But the case would be altogether different if this bird were to extend its range further north, say to any of the Baltic provinces, or in the direction of Finland. There, very early in the winter, a thick coating of ice covers all standing and most running water. There is an absolute dearth of food, and certain death must befall it if it does not make a hasty escape. In such a case it would not be possible, as in that of the waxwing, for the bird to pick up a scanty subsistence, for when once water and earth are frozen as hard as stone, there is absolutely no food for ducks. Nor is it only in the immediate neighborhood of his home that the earth thus suddenly becomes the abode of barrenness and death; wide regions of the way which the migratory bird has to travel are frozen over at the same time. So it comes that such a bird does not move leisurely from marsh to marsh, but hurries rapidly and in long stretches southward, so soon as the time of scarcity sets in. Let it be granted now that this imaginary species of duck, while spreading itself over the whole of Europe, has still remained a resident bird in its original home in the south of France, and we have before us all the stages of the development of the migratory instinct in regular succession, from the first

wandering to the fixed periodical migration from the uttermost north of Europe to the extreme south.

This is not precisely true of our ordinary wild ducks, because these almost all breed in the north and only take up their winter quarters in the south of Europe, possibly because the thickly populated south does not offer them a sufficiently quiet breeding-place.

In the case of the sea ducks, however, the analogy holds in the main, as also in that of the eider duck (*Somateria mollissima*), the bird which yields the costly eider down. This bird inhabits a very wide region, the whole northern circuit of the earth, from the west coast of Europe, the Channel, and the English and Danish coasts, as far as Norway, Iceland, Spitzbergen, and Greenland. In all this district it breeds and lines its nest with the precious down. The down might easily be secured after the bird had been allowed to breed in peace, but unhappily there has been throughout the extreme north a complete raid upon the nests of the eider duck. In the midst of the breeding season the feathers and eggs are taken, and as many of the old birds as possible are shot, and then it is matter of astonishment that the spoil in eider down becomes less and less every year. Such is the case, for example, in Spitzbergen. On the coasts of Germany, men act more rationally; the birds are spared, and in some cases they have even been carefully tamed, so that they will make their nests in the neighborhood of houses.

The eider duck is wholly a sea bird; it lives only on the coast, and is entirely dependent on the sea for its food, which consists of the lower marine animals, chiefly mussels and sea-snails, which it fetches up with great skill from the bottom of the sea, often at a depth of 100 to 150 feet.

It can, of course, only live in Greenland, Spitzbergen, and Iceland during the summer, as in winter the sea is frozen. The eider duck is, therefore, in those regions a migratory bird. The eider ducks of Greenland collect in enormous flocks on certain places of the coast, which are especially productive of food; the sea is literally covered with them for half a square mile. They take only a short time, however, to as-

semble ; then they rise into the air, and migrate in cloud-like masses southwards over the ocean, till they reach the British Isles, or the shores of the Channel and France, where the warm Gulf Stream keeps the water open, and here they winter.

I have already mentioned that on the German shores other eider ducks live which remain there throughout the year, and must therefore be classed as resident birds.

The eider duck, however, lives also on the shores of the Baltic ; and, as here the Gulf Stream does not penetrate, wide tracts of sea often freeze. The Baltic eider ducks are, therefore, compelled to wander. They first seek the still open spaces of water, and then are driven on as far as the North Sea. The eider duck of the Baltic is thus a wandering bird ; and we find, therefore, one and the same species in the Arctic zone a genuine migratory bird, on the Baltic only a wanderer, and in the North Sea resident ;—a conclusive proof that migration and wandering is not an essential characteristic of the species, but a habit which is adopted when the necessities of life require it, and a proof, moreover, that the regular migration has grown out of the irregular wandering in search of food.

So far we have only attempted to answer the questions : Why do birds migrate ? and, how did the migratory habit originate ?

To both questions we have found a sufficient answer. The birds migrate because stern necessity compels them to do so, and they are not born with an inherent wandering instinct, but learn the habit gradually, and just in the degree in which the influence of climate renders it imperative.

There remains the further question : How do the birds migrate ? with what means are they furnished to perform an act so wonderful ? How is it possible that after going hundreds of miles, they should find their old nest again ? Who shows the eider duck, which takes its flight from the misty shores of the Faroe Islands, the way to its summer home in Iceland or Greenland ? By what compass do they steer their course, that, starting from one particular point of the coast, they alight on the little spot of land

in mid-ocean, when the slightest deviation from the direct line would carry them hundreds of miles to the right or left of it ?

It must indeed be admitted that it is a very marvellous thing to see a cloud of birds pursuing, high in the air, as straight a course, in a certain direction, as a ship piloted by the most experienced steersman with chart and compass, and even more wonderful still does it appear, when the whirring sound of wings is heard far overhead in the dark night.

For a long time it was generally believed that these birds were endowed with a certain mysterious organ of locality, a sixth sense, which we cannot describe more accurately because we do not ourselves possess it. More recently an able naturalist * has suggested the hypothesis that the birds might be endowed with some organ which makes them sensitive to the magnetism of the earth, so that their own bodies indicate to them, like a magnetic needle, the direction of the magnetic pole.

There is always something questionable in assuming the existence of certain unknown organs of sensation in the brute creation. Scientifically we have no right to do this unless the phenomena are incapable of any other explanation. We must therefore first inquire whether the known five senses may not suffice to solve the mystery.

Even before entering on this inquiry, however, we may set aside the hypothesis of a magnetic sense. Not that it is in itself at all absurd. Just as we and most animals possess organs of sensation which make us conscious of the waves of light and of sound, so it is quite conceivable that there might be animals endowed with an organ, which should make perceptible to them the magnetic currents which flow over the surface of the earth.

But whether there be such animals or not, birds certainly possess no such magnetic sense, for we know now that in their migrations they are not at all affected by the magnetic poles, but simply seek out certain localities. They do not steer their course like a ship, to south or north, south-east or north-west, and keep the same direction till

* Dr. von Middendorff.

they reach their goal ; but they follow certain definite and often winding tracks, and guide themselves by mountains and valleys, rivers, seas, or coast lines.

It has been long a well-known fact in relation to migratory birds which cross the Mediterranean, that they make the transit only at certain fixed points. The first of these crossing places from the west is the Straits of Gibraltar, the second is from Tunis to the southern point of Sardinia, Cape Spartivento, and by Sardinia and Corsica, to the coast of the Gulf of Genoa. A third track is from Tripoli by Malta and Sicily to Italy ; and finally there is a fourth in the east of the Mediterranean, from Egypt by Cyprus into Asia Minor.*

Why do migratory birds cross the sea at these precise spots ? Is it because by these tracks they most quickly reach land ? or because in all these directions they pass over narrow arms of the sea, or over islands which afford them welcome resting-places ?

This has been hitherto supposed to be the reason, and for many birds these resting-places are indeed essential ; without them some could not possibly accomplish the journey. Even on the comparatively short passage from the African coast to Malta, the smaller migratory birds often perish if they are overtaken by storms.

It would be a mistake, however, to suppose that the birds had chosen these crossing places on account of the islands. If this were the case, then we should see them always taking the shortest route from the mainland to the nearest islands. But it is not so, for the distance from Tripoli to Malta is just double that from Cape Bon, near Tunis, to the western point of Sicily, and at the time of the year when the birds migrate, this part of the sea is often agitated by heavy storms. Why then have not the birds chosen the nearer way ?

In order to find an answer we must go back to an earlier time.

In the diluvial period the Mediterranean had not yet assumed its present

form. It consisted at that time of two large separate inland salt-water lakes. On the one side it was cut off from the ocean by a broad strip of land, where now are the Straits of Gibraltar ; on the other side the Italy of to-day, with Sicily, formed a land dyke, which was connected with the African coast, and thus divided that which is now called the Mediterranean Sea into two halves. The sea is still perceptibly shallower where this land-connection formerly existed, but there are also other and perfectly clear proofs that the lands bordering on the Mediterranean lay at that time higher than at present by nearly 900 metres. The birds, therefore, making their summer migration northwards at this period, would pass over these broad connecting tongues of land.

Gradually in the course of several thousand years the land sank, and tracts of water at first narrow, but gradually widening, divided Sicily and Spain from Africa. When we consider that the gradual elevation which is going on at present in Scandinavia, for instance, takes place only at the rate of $\frac{1}{2}$ feet in a century at the most, we can easily imagine that the depression was so gradual that from one year to another it was not perceptible.

The birds therefore, in their yearly migration to and fro, must have passed at first over a broad and then over a gradually narrowing belt of land, later still over marshes and lagunes, then over a small arm of the sea, and finally over broad waters ; and yet no one generation may have been aware of any change.

Most probably this is the explanation of the present course of the birds. The land has been gradually withdrawn from beneath them, and imperceptibly their flight over connecting belts of land has been changed into a passage across the sea. The birds did not then fly in the first instance in a certain direction across the open sea, but simply followed the land ; as the land gradually sank, however, they did not change their course, and it continues the same to this day, though it is now thousands of years since the land was submerged.

We understand now why the birds do not uniformly pursue a direct line from north to south, or from south to north,

* Some less frequented tracks are not here mentioned ; a description of them may be found in Palmén's excellent treatise, *Die Zugstrassen der Vögel*. Leipzig : 1876.

but only when this is the direction in which the land-bridges formerly lay ; we understand also how it is that we so often find islands on their track, for these are nothing else than the remains of the sunken land-bridges.

This fact throws clear light upon the whole phenomenon, and we have only to reply now to the further question : Why did the birds choose the land-bridges in order to cross the sea ?

If we call to mind what we have already observed of the origin of the migratory instinct in the waxwing, and in our hypothetical case of the duck, we shall not be long in perplexity about the answer. For we have seen that the birds did not for the most part choose at all ; they had not the remotest idea of crossing the sea when they followed the course of the belts of land northwards ; they simply took the only track by which they could extend themselves towards the north. No bird can make its home upon the water ; even the water-fowl have to seek the shore in the breeding season.

If then, at the time when the Mediterranean Sea still consisted of two great salt lakes, we suppose that a species of bird living to the south of it, on what would be now the north coast of Africa, increased and multiplied till its original habitat became too small for it, it would gradually spread northwards—that is, it would follow the then existing belts of land in that direction. If, however, these more northerly climates were only adapted for the maintenance of its life in summer, then in winter it must go southwards again—in other words, it would return to its old habitat. Let us suppose that in the course of centuries the climate became warmer, then it would gradually move its breeding-places further and further north, but would still return in winter by the same way, though by a gradually lengthening journey to its original home in the north of Africa. By the same track by which this species had gradually spread itself, would its particular generations move backwards and forwards year after year.

We arrive then at the very significant conclusion that the present tracks of migratory birds are nothing else than the old ways by which they originally spread themselves out towards the north.

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As we have already seen in the case of the waxwing, the gradual extension to the north of a species was the origin of the migratory habit ; but the adherence to certain definite tracks can only be explained on the supposition that the way by which it first moved northward became the habitual line of migration.

We shall now ask what ground we have for supposing that such an extension towards the north was a common and continuous phenomenon for any long period ?

We must not forget that there was a time when the animal life on our hemisphere was altogether different from what it is at present.

In the glacial period Central Europe had a colder climate than now, as is shown not only by the vestiges of northern or high Alpine forms of vegetable and animal life belonging to that period, but still more by the dense masses of ice which covered mountain and plain, and which must have caused a very perceptible lowering of the temperature, even if their very existence did not imply an intense degree of cold.

And not only in Central Europe, but south of the Alps also, the climate was far colder in the diluvial period than now. The Atlas, as well as the Lebanon and the mountains of Armenia, had at that time enormous glaciers, of which the moraines remain to this day, and form the soil on which now grow the famous cedars of Lebanon.

We shall therefore not be wrong if we suppose that very many birds, which now inhabit the central and northern regions of Europe, were at that time wanting, because the climate was too severe for them. They must therefore have come subsequently from the south, and with the gradual raising of the temperature there must have been a corresponding steady but of course very gradual influx of birds to the north. Just in proportion as the ice retreated, would the birds push forward the bounds of their habitat, and in the course of centuries may even have advanced hundreds of miles in this way.*

* It must not, however, be said that the migration of birds dates first from the glacial period. Probably it is of much earlier origin. Many birds were already birds of passage before the glacial period, and some of their tracks

Here, then, we have the first condition of the development of the migratory instinct—a gradual and steady progress of many species in a northerly direction.

That their progress was carried on in the same lines of route which are followed to-day by the birds in their migration, has been already asserted and partially maintained. Yet further confirmation is afforded by the interesting fact that the tracks by which wandering birds now move to and fro, differ in birds of different habits, that they generally follow precisely the direction which the species must necessarily have taken in its diffusion towards the north.

For the recent discovery of this important link in the chain of evidence we are indebted to the Swedish naturalist Palmén.

It will not, of course, be supposed that we are able to mark out the exact course pursued by each species, but in reference to one small group of birds the evidence is complete, and from this we may fairly deduce the broader conclusions.

We follow, then, the distinction which Palmén makes of four different classes of birds—the coast birds, the birds inhabiting river banks, the marsh birds, and finally the land birds.

In the first class we include all birds which find their sustenance by the seashore ; this comprehends all gulls which are not wholly inhabitants of the sea, sailing about over the broad ocean, the eider and other diving ducks (*Fuligula Stelleri*), many species of geese, phalaropes, sandpipers, and swans.

A number of these birds make their nests only in the extreme north, because they are among the earliest to migrate, and some species at the present day take an extraordinary journey southward, sometimes even crossing the tropic, so that they range over a vast area. Let us first trace the course taken by one of these species, in order to get from its

point to a still more distant date. As we cannot attempt here anything like an exhaustive treatment of the phenomena of migration, nothing more, indeed, than an explanation of the manner in which it arose, we must not enter on the question at what period of the earth's history the migratory habit may have begun.

breeding place to its winter quarters. I select a tolerably familiar example, the brent or barnacle goose. This bird breeds in great numbers in Spitzbergen and the north of Greenland, in Nova Zembla, and probably in still more northerly and yet unexplored regions, as we may conclude from the fact that early in the year great flocks of them are seen flying northwards from Nova Zembla.

The barnacle geese which breed in Greenland fly, like the eider ducks, first to Iceland, then over the Faroe Islands to Britain. Here they winter partly on the west coast of Ireland, partly on that of Scotland and England.

The Spitzbergen barnacle geese fly first southward as far as the west coast of Norway ; there they change their direction, and follow the Norwegian coast to the point where it bends to the south ; here the flock divides, one half flies over the Shetland Isles to Scotland, the other half follows the coast for some distance further, then leaves it and takes its course straight across the North Sea to the English coast, where they winter.

A third column of the army of barnacle geese comes from Nova Zembla, and from the unknown breeding places yet further north, and these we must follow a little more closely on their way.

At first they also keep pretty much a southerly direction, but presently they turn south-west by the shore of the Arctic Ocean, till they reach the southernmost bay of the White Sea. Here they leave the coast and fly across a whole chain of lakes till they reach the Gulf of Finland. Keeping a direct south-westernly direction they next follow the shores of the Baltic, touch the south of Sweden, and finally cross the narrow land-ridge of Schleswig. Generally they here fall in with the track of various other birds, and hence it is that in Schleswig-Holstein, at the migratory season, such an extraordinary number of birds is seen to congregate.

The particular track which we are following, now leads by the shore of the North Sea to the mouths of the Rhine. Here, in November, the barnacle geese cover the shore in vast numbers. As far as the eye can reach, the shallows or sandbanks left by the ebb tide are peopled by these geese ; their cry rises

above the roar of the surf. Seen from a distance, they look like one dense wide-spreading cloud of smoke, and they are, literally, like the sands of the shore, innumerable (Brehm). Here, however, the host divides; one half remains on the coast, and follows its course as far as France or Spain, the other goes up the Rhine towards Bâle, then skirting the Alps, it gets into the Rhone valley, and thence to the Gulf of Lyons. Here it again divides, and follows either the west coast of Spain or the French-Italian shore, in order finally to cross the Mediterranean by one of the three tracks we have already described, and so winter in Africa. Some individual birds of the flock, however, stop short on the Italian coasts and winter there.

The same course is pursued on the return journey.

The food of the barnacle geese consists chiefly of mussels, sea-snails, and worms, which they do not fetch, like the eider ducks, from the bottom of the sea, but seek along the coast, especially on the wet sand left by the retreating tide. They eat also grass and other herbaceous plants, among which they seem to prefer maritime plants, the salt grasses of the sea coast; hence, in the first dispersion they are sure to have followed the coast lines.

This supposition is borne out by the present course of their migrations. There seem, however, still difficulties in the theory that the track of the birds to-day corresponds with that by which they first spread northward. How, for example, is the enormously long sea-passage to Iceland and Greenland to be explained?

It must be at once admitted as unquestionable, that if Iceland and Greenland did not already possess migratory birds, they would never, under their present conditions, receive any from Europe; but in the diluvial period the case was quite different. Even if there was then no unbroken connection of land—a point still open—it is beyond question that at that time the Faroe Islands and Iceland were far larger than now, that the land then lay some 200 metres higher, so that, in any case, the countries were only divided by narrow channels of water. The most recent deep-sea soundings in the Atlantic have

given remarkable confirmation of this fact.*

The barnacle goose has therefore here also followed the coast line, and has continued its ancient course notwithstanding that the former connecting lands between Iceland and Greenland have been long submerged.

With what tenacity these old tracks are retained is shown, for example, by the common white wagtail. This species has an unusually wide distribution. In winter the wagtails go far into the interior of Africa; in summer they scatter themselves all over Europe and Asia, some even go as far as Greenland. From this spot they might find much nearer winter quarters if they flew across to the east coast of America, but not one of them has ever been seen on that continent. Every year they still retrace the old track by which they must first have come to Greenland—*i.e.*, by Iceland, the Faroe Isles, and England—and take the same sea passage as the barnacle goose.

If, however, in order to explain the migration to Greenland, we are obliged to assume the not yet fully ascertained fact that there once existed a land-connection, we find ourselves on perfectly safe ground when we come to account for the two tracks by which the barnacle goose, and many other birds of similar habits, cross the North Sea in an oblique direction. For this sea is known

* According to Professor Mohn, one of the scientific leaders of the Swedish Expedition to the Atlantic Ocean, "there stretches between the Faroe Isles and Iceland a continuous volcanic ridge, which divides the deeps of the Atlantic from those of the Frozen Ocean. Beneath the sea, Iceland stretches south-west to the 60th degree of latitude, and north-west to Jan Mayen. Between Iceland and Greenland the narrow seas (Dänemarksstrasse) are shallow, and the connection seems of the same nature as that between the Faroe Isles and Iceland. The southern portion of the deep frozen seas from the Faroe Islands to the Island of Jan Mayen consists of a channel more than 1,800 fathoms deep, which trends northwards, while the northern part, which is more than 2,600 fathoms deep, forms a triangle between Greenland, Jan Mayen, Bear Island, and Spitzbergen. While the water in the Atlantic depths shows degrees of heat to the very bottom, in the depths of the Frozen Sea there are degrees of heat only to the depth of from 300 to 400 feet; below this they only register degrees of cold."—*Frankfurter Zeitung*, No. 96, 6th April, 1877.

to have been land in the diluvial period, with the exception of one very narrow arm of the sea, which lay close to the present coast of Scandinavia. Both the tracks, therefore, by which the North Sea is now crossed, describe no doubt the old coast lines, which, at different periods of the diluvial era, formed the boundary of the land towards the sea.

Let us take now a rapid glance at the tracks of the other birds, the marsh birds, river-side birds, and land birds proper.

To the river-side birds belong the species which choose their habitat more or less in the neighborhood of fresh-water streams—as, for example, the whooper swan, the water-hen, most of the true ducks, the woodcock, some gulls, and many others. Their tracks are very numerous, and as winding as the streams which they follow up from the shore. If our view is correct, if the present tracks of the birds perpetuate the tradition of their first wanderings, then these must sometimes have led over mountain passes. These birds can indeed for a time live well enough in the midst of mountains, if only there are lakes or rivers at hand, in and around which they may find their food. As a matter of fact, we observe many of these tracks leading over high mountains—one, for example, going up the Rhine valley and over the Splügen; another up the Inn valley over the Bernina and Maloja passes to the Italian lakes.

Perhaps the reader may know the fine collection of locally-occurring birds shown by the landlord of the Hotel Saratz at Pontresina in the Upper Engadine. It is astonishing to see what a number of species have appeared in this small and barren district, but the marvel lessens when we know that by far the greater part of them are only birds of passage which in the transit from summer to winter quarters, or *vice versa*, have here met their fate.

With the tracks of the marsh birds we have a general, and in the case of one—the crane—a particular acquaintance. Especially interesting is it to note that these birds, so vigorous on the wing, go round the Alps, and from the Rhine follow the Rhone. They make, therefore, a wide circuit, certainly not because they are incapable of soaring over an Alpine pass, but simply because their ancestral

tracks in search of food would not be over the swampless Alps, but from marsh to marsh in the lowlands.

The tracks of the land birds are as yet comparatively unfamiliar to us in detail. We know only that they are very winding and intricate. How could it indeed be otherwise, since these birds had always broad lands before them on which they might alight, not mere strips of land like the sea, river, and marsh birds? They will therefore not have advanced in single file, as it were, but in broad battle array, in one long almost unbroken phalanx. They will have pressed forward wherever they found conditions favorable to their mode of life, and so a great variety of tracks must have become traditional with them. These, however, converge on some points from all sides, as, for example, in the Alpine passes, and then branch out again.

If, then, we may consider it proved that the present tracks of the birds really correspond with the old lines of their dispersion, the following conclusions present themselves.

To the first question, How can the birds find their way for such distances? we reply, By practice, not indeed the practice of the individual bird, but of the species. This marvellous facility in finding the way has not been acquired suddenly, but very gradually in the course of many thousand generations.

The fact that birds have adhered through such long periods to the same tracks proves that they knew them very exactly, and that they directed their flight to certain localities familiar to them.

If there were an unknown something within them which showed them that the land of their desire lay in this or that direction, then they would fly straight to the goal, over hill and vale, sea and river, to the place of their destination. But this they do not do. On the contrary, they follow all the sinuosities of coast or river; they go up a certain valley, cross a mountain pass at one exact spot, and descend on the other side into another valley, bending their course to all its windings. In other words, they know precisely all the individualities of a certain track, and never willingly deviate from one of them.

Is there, then, a special sixth sense required for this, or do the ordinary five

senses suffice? I do not at all see what further is needed than a keen power of observation, above all a sharp eye, which shall allow nothing to escape it that could help to identify the way, and, in addition to this, a very exceptional memory for localities by which the travellers shall be enabled to keep in mind all the features of their long journey. The taking the right direction in each special case will then follow as a matter of course.

We have no right to take for granted the presence of these two essential properties in the migratory birds. But it is easy to show that keenness of vision, as well as knowledge and memory of localities, must have been developing and intensifying in this class for many generations. They would be quickened in the first instance by practice in the parent-birds, and then the sharpened faculties would be transmitted from generation to generation with ever-accumulating force.

It is also clear that this development of the necessary faculties must have kept pace with the gradually increasing length of the journey. For as individual birds went further and further north, so the return journey became longer each year, and a greater number of local impressions needed to be carried in the memory. In other words the birds were compelled to exact heavier tasks from their memory, and thus by practice to strengthen and improve it. An increased keenness of vision must have been gained in the same way, for every organ is developed and perfected by constant use.

This is the case with ourselves. Who does not know Cooper's narratives of the seemingly marvellous faculty of the Indians for discovering their bearings—how they intuitively find the right course through forests in which European hunters, though familiar with the place, would be hopelessly lost; and how they follow the track of the fugitive foe, though to other eyes he may have left no sign?

In this case we can positively say that they possess no sense which we have not. Their eyes are sharper, their ears quicker than ours, only because long practice has taught them to observe minutely and to retain in the memory a faithful impression of things once seen. By being constantly obliged to thread untrodden ways, they have acquired the faculty of identifying any place in which they find them-

selves, by the help of a few well-remembered indications.

We note the reverse of this among highly cultivated nations, a progressive deterioration, namely, of the faculty of observing. In what German family of the higher class do we find at the present time thoroughly good sight? and how incapable are very many among us, if we find ourselves in a strange place, of carrying in our mind's eye such a plan of it as will enable us to guide our steps aright?

The young Indian does not possess intuitively an acquaintance with all the features of the neighboring forest, but at a very early age his naturally keen faculties of observation are exercised by his father, and thus he soon becomes an expert. So in the case of the young bird; it needs to be trained and instructed by its parents as to the track which leads back to the distant winter quarters. Among most birds the old and experienced, those who have often made the journey, lead the way. Not seldom it happens that the young birds show no desire to join the company, and then the mother-bird is seen to make ceaseless efforts to scare her young ones and to urge them forward, to save them from certain destruction. She does not always succeed however. Often the young birds will remain behind, and only begin to wander when necessity compels them. Then, generally, it is too late; a few may perhaps reach places where it is possible for them to winter, but the greater part perish. Such stray birds are by no means rare, and experience agrees with theory, in showing that they are almost always young ones.

But the majority of the young birds follow the old ones, and when they have thus been once or twice over the track they could find it alone, for they bring into the world with them, in a high degree, the organ of locality.

Just as a young Indian is born with a keen eye and talent for exact observation, which enables him quickly to appropriate the results of his father's experience; so the young bird, as soon as he cracks the shell, possesses, not indeed geographical knowledge, but a great talent for geography, which enables him very rapidly to learn by heart his geographical lesson, the track by which his race migrates.

It must be borne in mind also, that, in the gradual development of increased powers of sight and memory, natural selection has had an important part. Individual birds of imperfect sight are more likely to lose their way, and to fall victims to some of the dangers of the journey, than those of stronger organism, so that these would for the most part become the progenitors of a keen-sighted and observant race.

The same remarks will apply exactly to the gradually increasing swiftness of flight. This would be produced both by the development of the wing muscles from constant practice, and by the repeated survival of those birds that were strongest on the wing. The necessity for this more rapid flight would also become increasingly urgent, as each year the two extremities of the journey receded further and further; and we should be prepared to maintain that the rapid flight of many birds, as we observe it to-day, arose out of the exigencies of their migratory habit. Undoubtedly they owe their strength of wing very largely to this cause. If we compare to-day the flight of a hen or even of a sparrow, with that of a swallow or a gull, a peregrine falcon or a crane, how great is the difference! The one flies with much effort, taking violent leaps from roof to roof, from tree to tree; while the other shoots through the air at a rate which leaves our express trains far behind. A falcon belonging to Henry II. flew from Fontainebleau to Malta in twenty-four hours. The distance is 210 geographical miles; thus the bird flew at the rate of nine miles an hour.

The difference between the hen and the falcon in the power of finding its way, and in all the organs, especially those of the eye associated with this faculty, is certainly at least as great as the difference in the capacity for flight.

Those who find it difficult to imagine that the perfect confidence with which migratory birds pursue their course over land and sea, arises only from a fuller development of senses and talents possessed in common by all other birds, should be reminded that in many other not properly migratory birds, the power of finding their way must exist in a remarkable degree.

I spoke, at the beginning of this article, of the great resident of our pine for-

ests—the black woodpecker. Let us imagine that in the midst of a thick wood some one were to show us a tree in which was the nest-hole of a woodpecker, and then, taking us to the distance of a quarter of a mile, were to ask us to find the nest again. I believe there are very few indeed who would be able to do it, and these only after long seeking. Here stand hundreds of stems, not indeed all exactly alike, but still very similar, and we are not accustomed to pay attention to the minute differences which characterize each trunk.

But the woodpecker finds its nest without any long search, and although its wanderings for food carry it much more than a quarter of a mile away. Shall we then suppose that it has a particular sixth sense? Assuredly not. The tree-stems are, as it were, its working materials; it hews them, examines them, gets to know the trees so thoroughly from crown to base, with all their knotty outgrowths, unsound places, moss and lichen mantles, that by the look of a tree it recognizes at once where it is, and in what direction it must turn in order to reach another spot.

Clearly it must be by a process precisely similar that migratory birds determine their route.

But how can this apply to their long flight over the sea? Surely the indications of the way to be taken must under such circumstances be often wanting. The smaller birds may no doubt many of them miss their way over the sea, but there is one important element of the case which must not be forgotten—the height at which they fly. Every one who is familiar with the sea knows how the identification of, say a distant island, is facilitated by an elevation of the standpoint. Thus from the sea shore of Liguria, the distant peak of Corsica is not discernible; but let the traveller ascend only a hundred feet on the mountains, and in clear weather it stands out with perfect distinctness. But birds fly far higher than this, and when they are crossing the Mediterranean, at any rate, they will seldom or never lose sight of land. They fly, as it were, by the map, for to the bird-perspective land and water, mountains and valleys, must be spread out as in an embossed map below them. To what height birds can fly we have

only lately been informed by an astronomer,* before whose telescope, when taking observations of the sun, certain moving black specks suddenly appeared. They were birds soaring to the extraordinary height of 20,000 feet above the earth!

If we now briefly sum up the results we have reached, they are as follows:—

The migration of birds arose out of the fact that they became possessed of countries which could only supply them with adequate nourishment for a certain portion of the year, mainly, therefore, from their colonizing the temperate and Arctic zones of our hemisphere.

This colonizing did not take place all at once but gradually, for, especially since the glacial period, a gradual extension of various species of birds towards the north, from Africa and the Mediterranean, has been steadily going on.

During this slow advance of the species, certain qualities essential to this mode of life, have been developed in greater and greater perfection, as for example, continuity and rapidity of flight, quickness of vision, observation and memory of places. All these capabilities are possessed also by other birds, but generally in a much less degree. The

migratory birds are not endowed with any mysterious sixth sense.

We see, then, how in this case Nature attains great results by what seem insignificant means. Practice and habit are the magical agencies by which, in the course of long ages, the bodily and mental capacities of birds of this species are so enhanced, that it is only after long and careful investigation we can convince ourselves that they are not endowed with some special and peculiar power.

We have thus another proof to what a remarkable degree the organic faculties may be developed, and how largely they may be influenced, both in degree and direction, by the circumstances and conditions of the life.

Let me quote in conclusion words of Goethe's, which are peculiarly applicable to our subject, and which seem to anticipate the results of science. "As the eagle by soaring in free air and among rocky heights adapted itself to soar, so the mole fits itself by habit for the loose surface earth in which it lives, and the seal for its element the sea." And, so we may add, out of the habits and exigencies of their wandering life, have arisen the marvellous faculties of our migratory birds.—*Contemporary Review.*

LOVE'S PROMISE.

"I WILL come back," Love cried, "I will come back,"
And there where he had passed lay one bright track
Dreamlike and golden, as the moonlit sea,
Between the pine wood's shadow tall and black.
"I will come back," Love cried—Ah me!

Love will come back.

He will come back. Yet, Love, I wait, I wait;
Though it is evening now, and cold and late,
And I am weary watching here so long,
A pale, sad watcher at a silent gate,
For Love who is so fair and swift and strong,
I wait, I wait.

He will come back—come back, though he delays;
He will come back—for in old years and days
He was my playmate—He will not forget,
Though he may linger long amid new ways,
He will bring back, with barren sweet regret,
Old years and days.

* Mr. Tennant, who estimated the height to be "several miles :" see *Nature*, vol. xiii. p. 44.
—ED. C. R.

Hush ! on the lonely hills Love comes again ;
 But his young feet are marked with many a stain,
 The golden haze has past from his fair brow,
 And round him clings the blood-red robe of pain ;
 And it is night : O Love—Love—enter now.

Remain, remain !

—*Macmillan's Magazine.*

U.

CHAPTERS ON SOCIALISM.*

BY JOHN STUART MILL.

THE SOCIALIST OBJECTIONS TO THE
 PRESENT ORDER OF SOCIETY EXAM-
 INED.

IT is impossible to deny that the considerations brought to notice in the preceding chapter make out a frightful case either against the existing order of society, or against the position of man himself in this world. How much of the evils should be referred to the one, and how much to the other, is the principal theoretic question which has to be resolved. But the strongest case is susceptible of exaggeration ; and it will have been evident to many readers, even from the passages I have quoted, that such exaggeration is not wanting in the representations of the ablest and most candid Socialists. Though much of their allegations is unanswerable, not a little is the result of errors in political economy ; by which, let me say once for all, I do not mean the rejection of any practical rules of policy which have been laid down by political economists, I mean ignorance of economic facts, and of the causes by which the economic phenomena of society as it is, are actually determined.

In the first place, it is unhappily true that the wages of ordinary labor, in all the countries of Europe, are wretchedly insufficient to supply the physical and moral necessities of the population in any tolerable measure. But, when it is further alleged that even this insufficient remuneration has a tendency to diminish ; that there is, in the words of M. Louis Blanc, *une baisse continue des salaires* ; the assertion is in opposition to all accurate information, and to many notorious facts. It has yet to be proved

that there is any country in the civilised world where the ordinary wages of labor, estimated either in money or in articles of consumption, are declining ; while in many they are, on the whole, on the increase ; and an increase which is becoming, not slower, but more rapid. There are, occasionally, branches of industry which are being gradually superseded by something else, and, in those, until production accommodates itself to demand, wages are depressed ; which is an evil, but a temporary one, and would admit of great alleviation even in the present system of social economy. A diminution thus produced of the reward of labor in some particular employment is the effect and the evidence of increased remuneration, or of a new source of remuneration, in some other ; the total and the average remuneration being undiminished, or even increased. To make out an appearance of diminution in the rate of wages in any leading branch of industry, it is always found necessary to compare some month or year of special and temporary depression at the present time, with the average rate, or even some exceptionally high rate, at an earlier time. The vicissitudes are no doubt a great evil, but they were as frequent and as severe in former periods of economical history as now. The greater scale of the transactions, and the greater number of persons involved in each fluctuation, may make the fluctuation appear greater, but though a larger population affords more sufferers, the evil does not weigh heavier on each of them individually. There is much evidence of improvement, and none, that is at all trustworthy, of deterioration, in the mode of living of the laboring population of the countries of Europe ; when there is any

* Continued from the ECLECTIC MAGAZINE
 for April.

appearance to the contrary it is local or partial, and can always be traced either to the pressure of some temporary calamity, or to some bad law or unwise act of government which admits of being corrected, while the permanent causes all operate in the direction of improvement.

M. Louis Blanc, therefore, while showing himself much more enlightened than the older school of levellers and democrats, inasmuch as he recognises the connection between low wages and the over-rapid increase of population, appears to have fallen into the same error which was at first committed by Malthus and his followers, that of supposing that because population has a greater power of increase than subsistence, its pressure upon subsistence must be always growing more severe. The difference is that the early Malthusians thought this an irrepressible tendency, while M. Louis Blanc thinks that it can be repressed, but only under a system of Communism. It is a great point gained for truth when it comes to be seen that the tendency to over-population is a fact which Communism, as well as the existing order of society, would have to deal with. And it is much to be rejoiced at that this necessity is admitted by the most considerable chiefs of all existing schools of Socialism. Owen and Fourier, no less than M. Louis Blanc, admitted it, and claimed for their respective systems a pre-eminent power of dealing with this difficulty. However this may be, experience shows that in the existing state of society the pressure of population on subsistence, which is the principal cause of low wages, though a great, is not an increasing evil; on the contrary, the progress of all that is called civilisation has a tendency to diminish it, partly by the more rapid increase of the means of employing and maintaining labor, partly by the increased facilities opened to labor for transporting itself to new countries and unoccupied fields of employment, and partly by a general improvement in the intelligence and prudence of the population. This progress, no doubt, is slow; but it is much that such progress should take place at all, while we are still only in the first stage of that public movement for the education of the whole people, which when more advanced

must add greatly to the force of all the two causes of improvement specified above. It is, of course, open to discussion what form of society has the greatest power of dealing successfully with the pressure of population on subsistence, and on this question there is much to be said for Socialism; what was long thought to be its weakest point will, perhaps, prove to be one of its strongest. But it has no just claim to be considered as the sole means of preventing the general and growing degradation of the mass of mankind through the peculiar tendency of poverty to produce over-population. Society as at present constituted is not descending into that abyss, but gradually, though slowly, rising out of it, and this improvement is likely to be progressive if bad laws do not interfere with it.

Next, it must be observed that Socialists generally, and even the most enlightened of them, have a very imperfect and one-sided notion of the operation of competition. They see half its effects, and overlook the other half; they regard it as an agency for grinding down every one's remuneration—for obliging every one to accept less wages for his labor, or a less price for his commodities, which would be true only if every one had to dispose of his labor or his commodities to some great monopolist, and the competition were all on one side. They forget that competition is a cause of high prices and values as well as of low; that the buyers of labor and of commodities compete with one another as well as the sellers; and that if it is competition which keeps the prices of labor and commodities as low as they are, it is competition which prevents them from falling still lower. In truth, when competition is perfectly free on both sides, its tendency is not specially either to raise or to lower the price of articles, but to equalise it; to level inequalities of remuneration, and to reduce all to a general average, a result which, in so far as realised (no doubt very imperfectly), is, on Socialistic principles, desirable. But if, disregarding for the time that part of the effects of competition which consists in keeping up prices, we fix our attention on its effect in keeping them down, and contemplate this effect in reference solely

to the interest of the laboring classes, it would seem that if competition keeps down wages, and so gives a motive to the laboring classes to withdraw the labor market from the full influence of competition, if they can, it must on the other hand have credit for keeping down the prices of the articles on which wages are expended, to the great advantage of those who depend on wages. To meet this consideration Socialists, as we said in our quotation from M. Louis Blanc, are reduced to affirm that the low prices of commodities produced by competition are delusive, and lead in the end to higher prices than before, because when the richest competitor has got rid of all his rivals, he commands the market and can demand any price he pleases. Now, the commonest experience shows that this state of things, under really free competition, is wholly imaginary. The richest competitor neither does nor can get rid of all his rivals, and establish himself in exclusive possession of the market ; and it is not the fact that any important branch of industry or commerce formerly divided among many has become, or shows any tendency to become, the monopoly of a few.

The kind of policy described is sometimes possible where, as in the case of railways, the only competition possible is between two or three great companies, the operations being on too vast a scale to be within the reach of individual capitalists; and this is one of the reasons why businesses which require to be carried on by great joint-stock enterprises cannot be trusted to competition, but, when not reserved by the State to itself, ought to be carried on under conditions prescribed, and, from time to time, varied by the State, for the purpose of insuring to the public a cheaper supply of its wants than would be afforded by private interest in the absence of sufficient competition. But in the ordinary branches of industry no one rich competitor has it in his power to drive out all the smaller ones. Some businesses show a tendency to pass out of the hands of many small producers or dealers into a smaller number of larger ones ; but the cases in which this happens are those in which the possession of a larger capital permits the adoption of more powerful machinery, more efficient by more expensive pro-

cesses, or a better organized and more economical mode of carrying on business, and thus enables the large dealer legitimately and permanently to supply the commodity cheaper than can be done on the small scale ; to the great advantage of the consumers, and therefore of the laboring classes, and diminishing, *pro tanto*, that waste of the resources of the community so much complained of by Socialists, the unnecessary multiplication of mere distributors, and of the various other classes whom Fourier calls the parasites of industry. When this change is effected, the larger capitalists, either individual or joint-stock, among which the business is divided, are seldom, if ever, in any considerable branch of commerce, so few as that competition shall not continue to act between them ; so that the saving in cost, which enabled them to undersell the small dealers, continues afterwards, as at first, to be passed on, in lower prices, to their customers. The operation, therefore, of competition in keeping down the prices of commodities, including those on which wages are expended, is not illusive but real, and, we may add, is a growing, not a declining, fact.

But there are other respects, equally important, in which the charges brought by Socialists against competition do not admit of so complete an answer. Competition is the best security for cheapness, but by no means a security for quality. In former times, when producers and consumers were less numerous, it was a security for both. The market was not large enough nor the means of publicity sufficient to enable a dealer to make a fortune by continually attracting new customers : his success depended on his retaining those that he had ; and when a dealer furnished good articles, or when he did not, the fact was soon known to those whom it concerned, and he acquired a character for honest or dishonest dealing of more importance to him than the gain that would be made by cheating casual purchasers. But on the great scale of modern transactions, with the great multiplication of competition and the immense increase in the quantity of business competed for, dealers are so little dependent on permanent customers that character

is much less essential to them, while there is also far less certainty of their obtaining the character they deserve. The low prices which a tradesman advertises are known, to a thousand for one who has discovered for himself or learned from others, that the bad quality of the goods is more than an equivalent for their cheapness ; while at the same time the much greater fortunes now made by some dealers excite the cupidity of all, and the greed of rapid gain substitutes itself for the modest desire to make a living by their business. In this manner, as wealth increases and greater prizes seem to be within reach, more and more of a gambling spirit is introduced into commerce ; and where this prevails not only are the simplest maxims of prudence disregarded, but all, even the most perilous, forms of pecuniary improbity receive a terrible stimulus. This is the meaning of what is called the intensity of modern competition. It is further to be mentioned that when this intensity has reached a certain height, and when a portion of the producers of an article or the dealers in it have resorted to any of the modes of fraud, such as adulteration, giving short measure, &c., of the increase of which there is now so much complaint, the temptation is immense on these to adopt the fraudulent practices, who would not have originated them ; for the public are aware of the low prices fallaciously produced by the frauds, but do not find out at first, if ever, that the article is not worth the lower price, and they will not go on paying a higher price for a better article, and the honest dealer is placed at a terrible disadvantage. Thus the frauds, begun by a few, become customs of the trade, and the morality of the trading classes is more and more deteriorated.

On this point, therefore, Socialists have really made out the existence not only of a great evil, but of one which grows and tends to grow with the growth of population and wealth. It must be said, however, that society has never yet used the means which are already in its power of grappling with this evil. The laws against commercial frauds are very defective, and their execution still more so. Laws of this description have no chance of being really

enforced unless it is the special duty of some one to enforce them. They are specially in need of a public prosecutor. It is still to be discovered how far it is possible to repress by means of the criminal law a class of misdeeds which are now seldom brought before the tribunals, and to which, when brought, the judicial administration of this country is most unduly lenient. The most important class, however, of these frauds, to the mass of the people, those which affect the price or quality of articles of daily consumption, can be in a great measure overcome by the institution of co-operative stores. By this plan any body of consumers who form themselves into an association for the purpose, are enabled to pass over the retail dealers and obtain their articles direct from the wholesale merchants, or, what is better (now that wholesale co-operative agencies have been established), from the producers, thus freeing themselves from the heavy tax now paid to the distributing classes and at the same time eliminate the usual perpetrators of adulterations and other frauds. Distribution thus becomes a work performed by agents selected and paid by those who have no interest in anything but the cheapness and goodness of the article ; and the distributors are capable of being thus reduced to the numbers which the quantity of work to be done really requires. The difficulties of the plan consist in the skill and trustworthiness required in the managers, and the imperfect nature of the control which can be exercised over them by the body at large. The great success and rapid growth of the system prove, however, that these difficulties are, in some tolerable degree, overcome. At all events, if the beneficial tendency of the competition of retailers in promoting cheapness is foregone, and has to be replaced by other securities, the mischievous tendency of the same competition in deteriorating quality is at any rate got rid of ; and the prosperity of the co-operative stores shows that this benefit is obtained not only without detriment to cheapness, but with great advantage to it, since the profits of the concerns enable them to return to the consumers a large percentage on the price of every article supplied to them. So far, therefore, as

this class of evils is concerned, an effectual remedy is already in operation, which, though suggested by and partly grounded on socialistic principles, is consistent with the existing constitution of property.

With regard to those greater and more conspicuous economical frauds, or mal-practices equivalent to frauds, of which so many deplorable cases have become notorious—committed by merchants and bankers between themselves or between them and those who have trusted them with money, such a remedy as above described is not available, and the only resources which the present constitution of society affords against them are a sterner reprobation by opinion, and a more efficient repression by the law. Neither of these remedies has had any approach to an effectual trial. It is on the occurrence of insolvencies that these dishonest practices usually come to light; the perpetrators take their place, not in the class of malefactors, but in that of insolvent debtors; and the laws of this and other countries were formerly so savage against simple insolvency, that by one of those reactions to which the opinions of mankind are liable, insolvents came to be regarded mainly as objects of compassion, and it seemed to be thought that the hand both of law and of public opinion could hardly press too lightly upon them. By an error in a contrary direction to the ordinary one of our law, which in the punishment of offences in general wholly neglects the question of reparation to the sufferer, our bankruptcy laws have for some time treated the recovery for creditors of what is left of their property as almost the sole object, scarcely any importance being attached to the punishment of the bankrupt for any misconduct which does not directly interfere with that primary purpose. For three or four years past there has been a slight counter-reaction, and more than one bankruptcy act has been passed, somewhat less indulgent to the bankrupt; but the primary object regarded has still been the pecuniary interest of the creditors, and criminality in the bankrupt himself, with the exception of a small number of well-marked offences, gets off almost with impunity. It may be confidently affirmed,

therefore, that, at least in this country, society has not exerted the power it possesses of making mercantile dishonesty dangerous to the perpetrator. On the contrary, it is a gambling trick in which all the advantage is on the side of the trickster: if the trick succeeds it makes his fortune, or preserves it; if it fails, he is at most reduced to poverty, which was perhaps already impending when he determined to run the chance, and he is classed by those who have not looked closely into the matter, and even by many who have, not among the infamous but among the unfortunate. Until a more moral and rational mode of dealing with culpable insolvency has been tried and failed, commercial dishonesty cannot be ranked among evils the prevalence of which is inseparable from commercial competition.

Another point on which there is much misapprehension on the part of Socialists, as well as of Trades Unionists and other partisans of Labor against Capital, relates to the proportions in which the produce of the country is really shared and the amount of what is actually diverted from those who produce it, to enrich other persons. I forbear for the present to speak of the land, which is a subject apart. But with respect to capital employed in business, there is in the popular notions a great deal of illusion. When, for instance, a capitalist invests £20,000 in his business, and draws from it an income of (suppose) £2000 a year, the common impression is as if he was the beneficial owner both of the £20,000 and of the £2000, while the laborers own nothing but their wages. The truth, however, is that he only obtains the £2000 on condition of applying no part of the £20,000 to his own use. He has the legal control over it, and might squander it if he chose, but if he did he would not have the £2000 a year also. As long as he derives an income from his capital he has not the option of withholding it from the use of others. As much of his invested capital as consists of buildings, machinery, and other instruments of production, are applied to production and are not applicable to the support or enjoyment of any one. What is so applicable (including what is laid out in keeping up or renewing the

buildings and instruments) is paid away to laborers, forming their remuneration and their share in the division of the produce. For all personal purposes they have the capital and he has but the profits, which it only yields to him on condition that the capital itself is employed in satisfying not his own wants, but those of laborers. The proportion which the profits of capital usually bear to the capital itself (or rather to the circulating portion of it) is the ratio which the capitalist's share of the produce bears to the aggregate share of the laborers. Even of his own share a small part only belongs to him as the owner of capital. The portion of the produce which falls to capital merely as capital is measured by the interest of money, since that is all that the owner of capital obtains when he contributes nothing to production except the capital itself. Now the interest of capital in the public funds, which are considered to be the best security, is at the present prices (which have not varied much for many years) about three and one-third per cent. Even in this investment there is some little risk—risk of repudiation, risk of being obliged to sell out at a low price in some commercial crisis.

Estimating these risks at $\frac{1}{2}$ per cent., the remaining 3 per cent. may be considered as the remuneration of capital, apart from insurance against loss. On the security of a mortgage 4 per cent. is generally obtained, but in this transaction there are considerably greater risks—the uncertainty of titles to land under our bad system of law; the chance of having to realise the security at a great cost in law charges; and liability to delay in the receipt of the interest, even when the principal is safe. When mere money independently of exertion yields a larger income, as it sometimes does, for example, by shares in railway or other companies, the surplus is hardly ever an equivalent for the risk of losing the whole, or part, of the capital by mismanagement, as in the case of the Brighton Railway, the dividend of which, after having been 6 per cent. per annum, sunk from nothing to $1\frac{1}{2}$ per cent., and shares which had been bought at 120 could not be sold for more than about 43. When money is lent at the high rates of interest one oc-

casionally hears of, rates only given by spendthrifts and needy persons, it is because the risk of loss is so great that few who possess money can be induced to lend to them at all. So little reason is there for the outcry against "usury" as one of the grievous burthens of the working classes. Of the profits, therefore, which a manufacturer or other person in business obtains from his capital no more than about 3 per cent. can be set down to the capital itself. If he were able and willing to give up the whole of this to his laborers, who already share among them the whole of his capital as it is annually reproduced from year to year, the addition to their weekly wages would be inconsiderable. Of what he obtains beyond 3 per cent. a great part is insurance against the manifold losses he is exposed to, and cannot safely be applied to his own use, but requires to be kept in reserve to cover those losses when they occur. The remainder is properly the remuneration of his skill and industry—the wages of his labor of superintendence. No doubt if he is very successful in business these wages of his are extremely liberal, and quite out of proportion to what the same skill and industry would command if offered for hire. But, on the other hand, he runs a worse risk than that of being out of employment; that of doing the work without earning anything by it, of having the labor and anxiety without the wages. I do not say that the drawbacks balance the privileges, or that he derives no advantage from the position which makes him a capitalist and employer of labor, instead of a skilled superintendent letting out his services to others; but the amount of his advantage must not be estimated by the great prizes alone. If we subtract from the gains of some the losses of others, and deduct from the balance a fair compensation for the anxiety, skill, and labor of both, grounded on the market price of skilled superintendence, what remains will be, no doubt, considerable, but yet, when compared to the entire capital of the country, annually reproduced and dispensed in wages, it is very much smaller than it appears to the popular imagination; and were the whole of it added to the share of the laborers it would make a less ad-

dition to that share than would be made by any important invention in machinery, or by the suppression of unnecessary distributors and other "parasites of industry." To complete the estimate, however, of the portion of the produce of industry which goes to remunerate capital we must not stop at the interest earned out of the produce by the capital actually employed in producing it, but must include that which is paid to the former owners of capital which has been unproductively spent and no longer exists, and is paid, of course, out of the produce of other capital. Of this nature is the interest of national debts, which is the cost a nation is burthened with for past difficulties and dangers, or for past folly or profligacy of its rulers, more or less shared by the nation itself. To this must be added the interest on the debts of landowners and other unproductive consumers; except so far as the money borrowed may have been spent in remunerative improvement of the productive powers of the land. As for landed property itself—the appropriation of the rent of land by private individuals—I reserve, as I have said, this question for discussion hereafter; for the tenure of land might be varied in any manner considered desirable, all the land might be declared the property of the State, without interfering with the right of property in anything which is the product of human labor and abstinence.

It seemed desirable to begin the discussion of the Socialist question by these remarks in abatement of Socialist exaggerations, in order that the true issues between Socialism and the existing state of society might be correctly conceived. The present system is not, as

many Socialists believe, hurrying us into a state of general indigence and slavery from which only Socialism can save us. The evils and injustices suffered under the present system are great, but they are not increasing; on the contrary, the general tendency is towards their slow diminution. Moreover the inequalities in the distribution of the produce between capital and labor, however they may shock the feeling of natural justice, would not by their mere equalisation afford by any means so large a fund for raising the lower levels of remuneration as Socialists, and many besides Socialists, are apt to suppose. There is not any one abuse or injustice now prevailing in society by merely abolishing which the human race would pass out of suffering into happiness. What is incumbent on us is a calm comparison between two different systems of society, with a view of determining which of them affords the greatest resources for overcoming the inevitable difficulties of life. And if we find the answer to this question more difficult, and more dependent upon intellectual and moral conditions, than is usually thought, it is satisfactory to reflect that there is time before us for the question to work itself out on an experimental scale, by actual trial. I believe we shall find that no other test is possible of the practicability or beneficial operation of Socialist arrangements; but that the intellectual and moral grounds of Socialism deserve the most attentive study, as affording in many cases the guiding principles of the improvements necessary to give the present economic system of society its best chance.—*Fortnightly Review*.

CHARLES LAMB.—FIVE NEW ANECDOTES.

BY ALGERNON BLACK.

THE following new and characteristic anecdotes of Charles Lamb are well worth preservation. They formed a part of the ample recollections of the late Mr. John Chambers of Lee, Kent.

Mr. Chambers was for many years a colleague at the East India House of Charles Lamb, of whom he had a keen

appreciation and warm admiration. He himself is referred to in the *Essay by Elia* on *The Superannuated Man* under the letters Ch—, as "dry, sarcastic, and friendly," and in these words Lamb accurately defines his character. They probably worked together in the same room, or—in India-house language—

"compound," a term which Lamb once explained to mean "a collection of simples." Chambers was the youngest son of the Vicar of Radway, near Edgehill, to whom Lamb alludes in his letter given at page 307, vol. ii., first edition of Talfourd's *Letters of Charles Lamb* (Moxon, 1837). He was a bachelor, simple, methodical, and punctual in his habits, genial, shrewd and generous, and of strong common sense. He lived, after his retirement from active duty in the East India Company's Civil Service, at a snug cottage on the Eltham Road, near London, "with garden, paddock and coach-house adjoining," and delighted to gather round him a small circle of intimate friends, to whom, over a glass of "Old Port," he would relate, as he did with a peculiar indescribable dry humor, his experiences of men and things, and especially his reminiscences of the East India Company and of Charles Lamb. He always spoke of Lamb as an excellent man of business, discharging the duties of his post with accuracy, diligence, and punctuality. Chambers died on the 3rd September, 1862, aged 73. It is a matter of regret that of all the stories he related of Lamb these alone are now remembered, and for the first time written down by their hearer. The circumstances under which they were told, the humor of Mr. Chambers, and the running commentary with which he always accompanied any allusion to Lamb are wanting to lend them the interest, vividness, and charm of their actual narration.

1. Lamb, at the solicitation of a City acquaintance, was induced to go to a public dinner, but stipulated that the latter was to see him safely home. When the banquet was over, Lamb reminded his friend of their agreement. "But where do you live?" asked the latter. "That's your affair," said Lamb, "you undertook to see me home, and I hold you to the bargain." His friend, not liking to leave Lamb to find his way alone, had no choice but to take a hackney coach, drive to Islington where he had a vague notion that Lamb

resided, and trust to inquiry to discover his house. This he accomplished, but only after some hours had been thus spent, during which Lamb drily and persistently refused to give the slightest clue or information in aid of his companion.

2. Lamb was one of the most punctual of men although he never carried a watch. A friend observing the absence of this usual adjunct of a business man's attire, presented him with a new gold watch which he accepted and carried for one day only. A colleague asked Lamb what had become of it. "Pawned," was the reply. He had actually pawned the watch finding it a useless encumbrance.

3. On one occasion Lamb arrived at the office at the usual hour, but omitted to sign the attendance book. About mid-day he suddenly paused in his work and slapping his forehead as though illuminated by returning recollection, exclaimed loudly: "Lamb! Lamb! I have it;" and rushing to the attendance book interpolated his name.

4. On another occasion Lamb was observed to enter the office hastily and in an excited manner, assumed no doubt for the occasion, and to leave by an opposite door. He appeared no more that day. He stated the next morning, in explanation, that as he was passing through Leadenhall Market on his way to the Office he accidentally trod on a butcher's heel. "I apologised," said Lamb, "to the butcher, but the latter retorted: 'Yes, but your excuses won't cure my broken heel, and —— me,' said he, seizing his knife, 'I'll have it out of you.'" Lamb fled from the butcher and in dread of his pursuit dared not remain for the rest of the day at the India House. This story was accepted as a humorous excuse for taking a holiday without leave.

5. An unpopular head of a department came to Lamb one day and inquired, "Pray, Mr. Lamb, what are you about?" "Forty, next birthday," said Lamb. "I don't like your answer," said his chief. "Nor I your question," was Lamb's reply.—*Macmillan's Magazine*.

MADEMOISELLE DE MERSAC.

CHAPTER VI.

MADAME DE TRÉMONVILLE'S DANCE.

It was admitted on all hands that Madame de Trémontville's entertainments were invariably brilliant and successful. Her abode was one of the most spacious of the many charming villas which cover the hillside of Mustapha ; she never overcrowded her rooms, she paid special attention to the excellence of the refreshments provided ; and she even affected a certain exclusiveness, declining to know people who had not something — whether beauty, rank, wealth, or talent—to recommend them. Without much difficulty, she succeeded in becoming a leader of Algerian society, and those whom she invited to her soirées seldom sent her a refusal. The Duchesse de Breuil and a few other Legitimist ladies looked down upon her, it is true ; but that was a matter of course. They would have looked down upon anybody whose husband held office under the then existing Government, and this disdain gave Madame de Trémontville very little concern. She rather enjoyed an occasional passage-of-arms with Madame de Vaublanc ; and for the rest, she took good care that these ladies should recognize her when they met in any public place, and insisted upon visiting them, whether they liked it or not. "It is *chic* to be upon good terms with the old noblesse," she would sometimes say.

Her reputation was not wholly free from reproach ; nor was she well spoken of by the ladies of her acquaintance. As, however, nothing had as yet been proved against her, as she was very hospitable, and as she had a retentive memory and a sharp tongue, she was always able to fill her ball-room with members of the best society Algiers could produce.

Barrington, whom Léon in fulfilment of his promise duly escorted to Madame de Trémontville's next dance, was enchanted with the scene that met his eye as he passed through the doorway, where the mistress of the house stood smiling impartially upon each fresh arrival. The large square room into which he

looked, with its white walls, its polished *parquet* and its multitude of lights, was all ablaze with showy uniforms and jewels. As far as appearance went, Madame de Trémontville's modest salon might have been the reception-room of an ambassadress—so closely do ordinary mortals resemble their more exalted brethren if decked out in sufficiently fine clothes. The ladies were all well dressed—as indeed any community of Frenchwomen would be sure to be, however remote their habitation—and if the Orders which adorned the coats of the gentlemen were not invariably of the first or second class, they did not on that account make a less brave show. To the uninitiated eye one ribbon or star is very much like another.

Barrington, while scrutinising with pleased surprise so refined and civilised a gathering, was a little disappointed at failing to discover Mademoiselle de Mersac among the guests. He watched the dancers from the beginning to the end of a waltz ; he sauntered through the ball-room, the card-room beyond it, and out on to the verandah, lit by hanging Moorish lamps of colored glass ; but nowhere could he discover the graceful, majestic figure of which he was in search. Léon offered to introduce him to a partner, and in common courtesy he could not decline ; but as soon as he had walked through a set of Lancers, he returned to the doorway, and resumed his patient watch. The only entry he witnessed for his pains was that of M. de Saint-Luc, who lounged in very late, and surveyed the assemblage with a look of anxiety gradually deepening into intense annoyance and disgust, which caused the other disappointed watcher to chuckle in his corner.

Madame de Trémontville advanced to meet her guest with marked cordiality. In him she recognised one of the most prominent men of the epoch. Algiers generally knew little of M. de Saint-Luc, except that he had dissipated a large fortune by riotous living ; but Madame de Trémontville was not as those barbarians. She knew her Paris ; and was proud to welcome the man whom Imperialism had delighted to honor. Thanks

to her sedulous study of certain Parisian journals, as well as to sundry private sources of information, she could have given him a tolerably accurate account of all his escapades in chronological order. Some years back, being at Longchamps, she had seen him leaning on the carriage-door of one of the famous ladies who frequented the Emperor's Court. The great race of the day had just been lost and won, and the crowd was beginning to disperse. A bystander, nudging his companion, had said, "Do you see that man? That is the Vicomte de Saint-Luc who has just lost a hundred thousand francs—there is one who ruins himself gaily"—and Madame de Trémontville, overhearing the remark, had watched the imperturbable loser with increased interest, had seen him slowly make his way through the lines of carriages, bowing to one lady, shaking hands with another, and exchanging a few words with a third, till he reached the equipage of a notorious leader of the demi-monde, into which he had stepped and had been driven away with the eyes of all Paris upon him. Madame de Trémontville, witnessing this little scene, had felt a momentary thrill of noble enthusiasm. "That is my ideal of a man!" she had exclaimed. So strange are the masculine ideals which some ladies have come to set up for themselves in the days in which we live. She donned her most winning smile, therefore, as she held out a tiny white-gloved hand to this hero, and thanked him for honoring her poor soirée with his presence.

"You will not find our little society amusing, monsieur," she said, deprecatingly; "but what can you expect? With the best will in the world, it is impossible to transplant the Tuilleries to Africa."

Saint-Luc expressed contented acquiescence in this indisputable geographical fact, and took an early opportunity of escaping from his amiable hostess. He leant against the wall, and contemplated the company with a gloomy disapproval for which their provincialism was in no way responsible. There was M. de Trémontville, elderly, smooth-shaven, and dapper, rubbing his hands and beaming through his spectacles—the incarnation of a bureaucrat. (His real name was Bonjean; but, following the

example of many others of the Emperor's servants he had tacked the name of his native place on to his own plebeian patronymic, and now signed himself Bonjean de Trémontville, when he did not forget the Bonjean altogether. "After all," as Madame de Vaublanc was wont to say in her good-natured way, "the man must have been born somewhere, and why not at Trémontville—if there be such a place. Let us at least be thankful that he did not first see the light at Condé or Montmorency.") Then there was Madame Waranoeff, a fat Russian lady, who was at Algiers for her health, with her two fuzzy-haired marriageable daughters on either side of her; there was little M. de Fontvieille, with his nose in the air, conversing with Monsieur the Archbishop, who had condescended to show himself for a few minutes at the house of so devout a member of his flock as Madame de Trémontville; there were the Sous-Gouverneur, the Préfet, the Sous-Préfet, the Mayor, half-a-dozen generals, and their wives, their daughters, their aides-de-camp, and their secretaries.

"Parbleu! they are *all* here," growled Saint-Luc under his breath—"all except the one person whom I came to meet."

But before the words had well escaped his lips he heard the voice of his hostess behind him welcoming some new-comer in her most honeyed accents.—"Ah, dear madame, is it possible that my poor little dance can have induced you to break through your rule of going to bed at half-past nine? It is too great an honor that you do me—really too great an honor!"—and turning round to see who this distinguished guest might be, he became aware of Madame de Vaublanc's sour visage, above which, serene and beautiful, towered the head and shoulders of Mademoiselle de Mersac. At this sight M. de Saint-Luc's features, which had hitherto worn an expression of the deepest dejection, became suddenly cheerful and animated. He made a hurried move in the direction of the doorway; but here his progress was interrupted by Madame de Vaublanc, who was eagerly explaining to her hostess that she was not there for her own pleasure.

"I never go to balls, not even to those given by my most intimate friends, much less—that is, I really never enter

a ball-room. It was Mademoiselle de Mersac who persuaded me—she had no chaperon, and I did not wish her to be deprived of a little amusement—she does not have too much, poor child!—otherwise—”

“ Then we are doubly indebted to mademoiselle,” returned Madame de Trémonville, sweetly. “ It was already very amiable of her to join a party of which she will be the chief ornament, but since she has brought you too with her, madame, I have no more fear as to the success of my evening.”

“ Oh, madame, your compliment is intended to be ironical, no doubt; ugly old women are no attraction in any salon.”

“ Kindness and courtesy, madame, are attractive in persons of all ages.”

Saint-Luc waited patiently till these amenities should be exhausted, and Madame de Vaublanc should see fit to leave the gangway free. Meanwhile Mr. Barrington, being less scrupulous, had pushed his way past the old lady, with a brief, “ Pardon, madame,” and having shaken hands with Jeanne, who received him cordially, was writing his name upon her card. He wrote it more than once, as Saint-Luc observed with jealous surprise. What could there be in this self-satisfied Englishman to make Jeanne, who treated all men alike with the same hauteur, unbend towards him as towards an old friend? Was it because he was a Protestant, a foreigner, a man whom she could never be asked to marry, that she allowed him to take her ball-card out of her hand, and only laughed when he held out her fan at arm’s length and pretended to criticise the painting upon it with an artist’s eye? Saint-Luc would fain have believed so; but there was a look of frank admiration in Mr. Barrington’s blue eyes which he could not but perceive, and which caused him a good deal of uneasiness. At length Madame de Vaublanc moved on into the room, and then his opportunity came. He had already bowed to Jeanne from afar, and had received a cold acknowledgment of his salute. He now stepped to her side as she swept past him. “ Mademoiselle will accord me a dance, I hope,” he said, humbly.

She stopped at once, and drawing out her card, answered with that chilly po-

liteness which always froze poor Saint-Luc’s pretty speeches before they were uttered, “ With pleasure, monsieur; which dance shall it be?”

He named a waltz half-way down the programme, and with a slight bend of her head, she had left him before he had found courage enough to ask for a second one. He fell back, almost inclined to laugh at his own timidity. The truth is that the Vicomte de Saint-Luc, who had led cotillions in the presence of royalty, who had danced with princesses, and whose audacity in pushing his advances towards any lady whom he might chance to honor with his preference was a matter of notoriety, was as diffident as any schoolboy in the presence of the girl whom he loved.

“ I am an imbecile—a veritable imbecile,” he murmured impatiently, as he lounged up to do his duty to the lady of the house.

With her, at all events, he was quite at ease. She belonged to a species with whose habits and tastes he was thoroughly conversant; and he managed, without any effort, to dance with her and take his fair share of the conversation, while, at the same time, his whole attention was fixed upon Jeanne, not one of whose movements escaped him. Many other eyes besides his were turned in the same direction. Mademoiselle de Mersac did not often appear in Algerian ball-rooms; but when she did honor them by her presence she never failed to excite more admiration than anyone else in the room. Her beauty was of that superb kind which refuses to be ignored; it eclipsed the mere prettiness of other women as the moon outshines the stars, and extorted an unwilling tribute even from those who would gladly have depreciated it—for unfortunately the people who had been, or imagined themselves to have been, slighted by the imperious Jeanne formed no inconsiderable portion of any society in which she was likely to show herself. This evening her praises were sung with more cordiality than usual, for she was in an exceptionally gracious mood, and, contrary to her custom, had engaged herself for every dance. She refused no partner till her card was full; she waltzed impartially with Mr. Barrington, with M. de Choisy, the Governor-General’s aide-

de-camp, with little Martin, a sub-lieutenant in a line regiment, who was only admitted into Society because his uncle was a bishop—and with a dozen others. She wore a dress of pale primrose silk (it was her habit to affect costumes somewhat richer than those generally adopted by unmarried ladies), and had steel ornaments on her neck, ears, and hair, which flashed with every turn of her graceful head. She was incontestably the most striking figure in the room.

This did not please Madame de Trémouville, who had no liking for the part of second fiddle, and who, previous to the arrival of this magnificent rival, had flattered herself that she had nothing to fear from comparison with any of her guests. "Do you admire gigantic women?" she whispered to Saint-Luc. "For my part, I think excessive size is as much a defect in us as it is a beauty in you."

Saint-Luc, who stood six feet two in his socks, answered mechanically that he had no eye for proportions, but that those of madame were, without doubt, the standard by which the whole sex should be judged; and received a playful tap on the shoulder from his partner's fan, in acknowledgment of this novel and delicate compliment. Madame de Trémouville's green velvet and Brussels lace, her exquisite complexion, and her wondrous coiffure were altogether thrown away upon him. He had not even noticed the diamonds which encircled her throat and sparkled amid her golden locks.

"All paste," sneered Madame de Vaublanc, scrutinising these jewels from the corner where she had ensconced herself beside a congenial friend—"bought in the Palais Royal for a few hundred francs, you may be sure. Is it likely that that poor man would accept a small employment in Algeria if he could afford to give his wife such diamonds as those? Absurd!"

"Perhaps he did not buy them," suggested the other amiable matron; "perhaps they were a *present*. It is said that M. de Trémouville does not object to his wife's receiving occasional marks of esteem from her friends. They were talking of her the other night at the Palace—and between ourselves—" Here the good lady's voice is lowered

to so confidential a pitch that we can't quite catch what she says. Very likely we don't lose much. Communications of a somewhat similar nature are to be heard every night in all countries and in all classes of society. What is an old woman without daughters to do at a ball, except to take away the character of the young ones? Madame de Trémouville, whose conduct, it must be allowed, had more than once exhibited a target for the arrows of scandal to be aimed at, knew very well that ladies of Madame de Vaublanc's calibre could do her very little real injury; it amused her to know that they were on her track, and she liked to lead them on, and double, and baffle them when she was in the humor. Partly with this laudable object in view, and partly for her own gratification, she made a dead set at Saint-Luc during the early part of the evening, dismissing her other partners to dance with him again and again, till, seeing a large figure ♀ hung out in front of the orchestra, he quitted her side rather abruptly.

"At last!" he muttered, as he made his way through the crowd to a small boudoir which he had seen Jeanne enter with Barrington at the end of the last dance. He found her seated on a low divan, the Englishman sprawling at her side, and presented himself with a bow. She glanced up at him enquiringly, then down at her card, and rising immediately placed her hand within the arm which he offered her; and so they re-entered the ball-room.

"You have danced a great deal this evening, mademoiselle," said Saint-Luc, with that strange difficulty in opening the conversation which he had never experienced in his intercourse with any woman except Jeanne.

"Yes; a good deal."

"More than usual, I think."

"Yes; rather more than usual."

"I fancied you did not care much for balls."

"*C'est selon.*"

"I suppose you mean that it depends upon your partners," said Saint-Luc, with a tinge of annoyance in his voice. Her manner was disagreeable enough to justify some resentment; but it was more with himself than with her that he was vexed; for he felt that, somehow or

other, he was not showing to advantage.

"Naturally," she answered.

"Is that Mr. Barrington a good dancer?"

"Mr. Barrington? Yes, he dances well."

"He must differ then from the rest of his nation. Without vanity, I will venture to assert that you will find ten good dancers in France for one in England."

"Really?"

"Yes. There are exceptions, of course; but, as a rule, Englishmen are not made for society. They always seem to me to require the open air. Out of doors they have a certain rough good humor, which excuses a good deal of *gaucherie*; but put them in a *salon*, and they become insupportable."

"You have been in England, monsieur?"

"No; but I have met a great many Englishmen. Perhaps I am prejudiced, but frankly I do not like them. After all, the French and English are hereditary enemies."

"My mother was an Englishwoman; and, for my own part, I have always been proud of being half English," said Jeanne.

After that Saint-Luc thought he would change the subject.

"Is it an impertinence, mademoiselle," he said, "to congratulate you upon your charming toilette? I have seen nothing like it since I left Paris."

A very slight bend of the head, combined with a supercilious droop of the eyelids and an upward curve of the lips, seemed to imply, as plainly as politeness would permit, that Mademoiselle de Mersac did consider the remark an impertinence.

Saint-Luc felt this to be rather hard; it was so utterly at variance with all his experience that any lady should object to hear her dress praised. He was completely silenced, and bit his moustache moodily. It was Jeanne who spoke next.

"Shall we not dance?" she said, "the waltz is half over."

It really seemed the only thing to be done. In this particular, at all events, Saint-Luc felt that he could hardly give offence. His Parisian apprenticeship had lasted so long that he knew himself

to be a complete master of the art of waltzing; and as he piloted his partner smoothly and swiftly through the throng, never losing time, and never so much as brushing against another couple, he took some comfort from the thought that though it appeared impossible for him to open his mouth in Jeanne's presence without angering her, she could not, at least, complain of him as a partner.

When the dance was at an end, he got a little disdainful compliment for his pains.

"You have a right to criticise the dancing of others, Monsieur de Saint-Luc," said Jeanne; "your own is perfect." If she had added, "You are fit for nothing better than dancing," she could not have conveyed her meaning more clearly to the mind of her hearer.

The poor Vicomte was as much puzzled as he was hurt. He could not in the least understand the girl, nor what she was driving at. He would have liked to ask her point-blank what he had done to be so cruelly snubbed, and why she should regard a man who had never willingly offended her with such determined aversion. Had he done so, he would have risen several degrees in her estimation, and would probably have got an honest answer into the bargain; but he thought that conventionality barred him from so straightforward a course—and, after a minute's consideration, he could find no better rejoinder than a rather aggrieved one to the effect that he did not care about dancing, and would not have been where he was that night, had he not been told that he would be rewarded by meeting Mademoiselle de Mersac.

"You do not like dancing?" said Jeanne, incredulously, passing by his reference to herself. "I thought you were such a famous leader of cotillions. *À propos*, who leads the cotillon this evening?"

"I suppose you know that I am to do it," answered Saint-Luc, with a little vexed laugh. "I should have preferred to refuse; but what could I do when that woman insisted? She is one of those people who are no more disturbed by a refusal than a rhinoceros by a discharge of small shot."

"If you do not like her, why do you dance so much with her?" asked Jeanne,

gravely. "You have scarcely left her side the whole evening, and now you compare her to a rhinoceros. I wonder what flattering likeness you will discover for me when my back is turned."

Saint-Luc was very patient, and very much in love; but this unremitting hostility was becoming too much even for him. "When you know me better, mademoiselle," he said, coldly, "you will find that I do not speak ill of my friends. As for Madame de Trémontville, she is no friend of mine. Here comes your partner for the next dance. I suppose I must not hope to be honored by another."

Mademoiselle de Mersac regretted that she was engaged for the remainder of the evening; and so, with a slight inclination of her head, passed back into the ball-room on the arm of the happy M. Martin, leaving Saint-Luc to meditate over the progress of his suit. He shrugged his shoulders in contemptuous wonder at his own infatuation as he made his way into the card-room, where three old gentlemen were playing *whist* with dummy; and there he remained, not caring to dance again, till the time came for him to fulfil his cotillon duties.

The cotillon, without which no French ball is complete, has failed to take root as an institution in England, probably because it has never been rightly understood in this country, where, indeed, it is usually considered to be a sort of organised romp, of which the principal features are the stationing of a lady in the middle of the floor with a looking-glass in her hand, the throwing of a ball to be scrambled for by a line of male competitors, and the affixing of a set of harness, adorned with jingling-bells, to the shoulders of four unhappy and self-conscious men, who are then driven round the room, feebly endeavoring to mitigate the absurdity of their position by an agonised imitation of the pawing and prancing of a spirited team. What Madame de Trémontville understood by a cotillon was something infinitely more intricate, more artistic, and more decorous than this. With its complicated figures, its crossings of hands, its frequent changes of partners, its involutions and evolutions, and its stately rhythmic measures which melted into waltzes, it was a performance

which required some study and management, and no one was expected to take part in it who was not familiar with its more ordinary figures, and who was not quick at catching up the new ones which were constantly being introduced into it. The inevitable looking-glass, the bouquets, and the badges were not omitted from the programme; but they were by no means its chief feature, nor did they lead to anything in the semblance of a romp. Not that Madame de Trémontville had any objection to the latter method of passing the time when her more intimate friends were gathered about her—on the contrary, she had a strong predilection for it, derived like her Ultramontanism, her penchant for *bric-à-brac*, and many other incongruous tastes, from quarters whence she obtained her notion of the prevailing fashion—but, in mixed society, she judged it best to earn a character for elegance rather than eccentricity.

"Are you not ashamed of yourself?" she cried, seeking out Saint-Luc in the card-room, towards two o'clock in the morning, and rousing him by her thin falsetto voice from the reverie in which he had been plunged. "Does one go to balls to look on at a game of *whist*?"

"What pleasure could it have given me to remain in the ball-room and see you dancing with others?" returned Saint-Luc, in his politely perfunctory manner.

"Ah, bah! you were lazy. I would have danced with you if you had taken the trouble to ask me. In your absence, I have been amusing myself with your friend the little marquis, whom I found much improved by his travels. He will develope himself. I have great hopes of him. But now I am going to make you work, whether you will or no. Here is the list of our figures for the cotillon. With which would you advise me to begin?"

Saint-Luc took the strip of paper which she handed to him, and having perused it, briefly delivered his opinion as to one or two points in the programme; Madame de Trémontville listening to him with as much reverence as a newly-joined subaltern displays in listening to his colonel. In truth, Saint-Luc had long ago reached the highest grades in that service of fashionable so-

society of which the lady was but a hanger-on and exiled admirer.

Entering the ball-room presently, laden with the paraphernalia of flowers, ribbons, hoops, and so forth, necessary for the task set before him, he was surprised to see Jeanne seated upon one of the chairs which had been ranged round the room for the convenience of the dancers. Knowing how seldom she lingered at any entertainment after midnight, he had not counted upon seeing her again that evening, and perhaps the sight of her might have pleased as well as surprised him if the tenant of the chair next to hers had not been Mr. Barrington. As it was, he frowned uneasily. Of Barrington in the character of a possible husband to Jeanne he had no fear; difference of nation, religion, and language were sufficient guarantees against the chance of such a match being proposed; but he was jealous, furiously jealous, of the man who, without any apparent effort, had managed to make himself acceptable to Mademoiselle de Mersac during an entire evening, and who was even now bending over her with a familiarity which he—Saint-Luc—would never have dared to assume. Had he been a vain man he would have been mortified at the ease with which another had succeeded where he had so lamentably failed; but vain he was not—only envious and jealous, as was but natural under the circumstances.

Saint-Luc had reduced the leading of a cotillon to a science. He could direct its most intricate movements, and at the same time reserve a large portion of his attention for some other subject. He was able, therefore, to acquit himself to the entire satisfaction of his hostess, while watching with increasing pain and wonder the progress of the sudden intimacy which had sprung up between Jeanne and the Englishman. Observing the unconscious couple thus closely, he soon became aware of a phenomenon for which he was at first at a loss to account; namely, that, whereas Barrington was evidently in the best of spirits, and grew more talkative and merry with each successive figure, Jeanne, on the contrary, was as evidently dissatisfied, and became gradually graver and more preoccupied, till at last she ceased to speak to or notice her partner at all. It

was not till the cotillon was three parts over that Saint-Luc discovered the clue to this change of mood. A most decided frown upon Jeanne's straight brows and an impatient tap of her foot enlightened him. He followed the direction of her glance, and was just in time to catch the conclusion of a little scene which the rest of the company had been watching with more or less of satirical interest. Exactly in the centre of the room, before the eyes of all Algiers, Madame de Trémontville, having selected a flower from a bouquet which she held in her hand, was presenting it to Léon, who, with the sublime fatuity of which only a very young Frenchman can be capable, raised it to his lips before fixing it into his buttonhole. The figure which had just come to an end was that in which gentlemen are permitted to select their partners by the presentation of a bouquet, and it was in the above-mentioned way that the mistress of the house chose to manifest her recognition of the compliment paid her by the young marquis. Saint-Luc recollects immediately that Madame de Trémontville had invariably singled out Léon when she had been called upon to choose a partner, and the reason of Jeanne's displeasure became obvious to him. In her place he would have been disposed rather to laugh than to be angry; but, regarding Jeanne as he did with a reverential awe, as a being of infinitely greater purity and nobility than himself, he understood that, in her eyes, any semblance of flirtation with a married woman must be a heinous crime, and more with a view to saving her annoyance than to rescuing his young friend from any possible peril, he resolved to take an early opportunity of speaking a few words of friendly caution to Léon.

His own bouquet, which he ought by rights to have presented to some lady, lay unheeded on the floor at his side. He had not taken the trouble to offer it to anyone, seeing that the only person in the room whose good-will he valued in the least had shown him in the most unmistakable manner that his attentions were unwelcome.

But now humility was unexpectedly rewarded. For, the order of the dance being changed, and it being the turn of the ladies to choose the partners most agree-

able to them, who should come gravely up to the diffident Vicomte, with a little badge of red ribbon outheld between her finger and thumb, but Mademoiselle de Mersac?

Saint-Luc started, half-delighted, half-doubtful. For a second he thought the stately young lady who stood before him must have made some mistake; but no—there was the knot of red ribbon within an inch of his nose, proffered a trifle disdainfully, it is true, yet distinctly intended for him. He pinned it on his coat, too much bewildered to find any words, and mechanically placed his arm round Jeanne's slender waist. But before he had taken half a turn round the room, his partner let him know that she wished to stop. They were then exactly opposite the door.

"I am going away," she said in that quiet, commanding tone, as of a superior to an inferior, which she always used in addressing Saint-Luc. "If they can spare you for a few minutes, I should be much obliged if you would take me out to get my wraps."

"They *must* spare me," he answered joyfully, leading her out into the dim hall, where Madame de Vaublanc, with a wonderful peaked hood on her head and a multiplicity of cloaks and mufflers about her small person, was awaiting her charge. "If they want me, they must do without me. I should be perfectly willing to send them all to purgatory for the chance of doing you the smallest service."

"That will not be necessary," answered Jeanne, with a slight smile; "but it happens that I have to ask you to do me a small service—in fact, I brought you out here for that purpose."

"If it be in my power to do what you wish, mademoiselle, you may consider it an accomplished fact."

"It is certainly in your power," she said, and paused for a moment. Then she resumed, rather hurriedly—"You have great influence over my brother—more, I think, than I have, in some things. I want you to use it to keep him away from Madame de Trémontville. You will understand what I mean. You saw what took place to-night; and Léon is a young man; and—and I suppose all young men are the same. And he will listen to you, though I doubt whether he

would listen to me. I would not ask you to do me this favor!" she concluded, "if it were likely to give you any trouble or inconvenience; but, so far as I can see, it will do neither. After all, you can scarcely have any *interest* in bringing my brother and Madame de Trémontville together."

For an instant the color rose to Saint-Luc's pale cheeks, and his eyes flashed; but he had perfect self-control, and it was without any show of anger, though more coldly than usual, that he answered, "I do not know from whence you have derived your opinion of me, mademoiselle; but it does not appear to be a high one. For the rest, you are quite right—I am not worth much; yet I am capable occasionally of acting from other motives than those of self-interest; and as to the subject of which you speak, I had already intended to take the liberty of saying a few words to your brother about it—so that you need not feel annoyed by the thought that you are under any obligation to me—however small—in the matter."

And as Jeanne looked at him a little doubtfully, he added, "Some day, mademoiselle, you will perhaps acknowledge that, whatever my faults may be, I am, at least, not untrue to my friends."

Jeanne, not being as yet convinced of the truth of this statement, and finding nothing to say in answer to it, merely bowed and turned to follow Madame de Vaublanc, whom M. de Trémontville was now helping into her carriage. But when she had taken a few steps, she wheeled round, and marching back to Saint-Luc, said abruptly—

"It is possible that I have been unjust to you, monsieur; if so, I am sorry for it. And I think I treated you rather rudely earlier in the evening; I am very sorry for that also, and I beg your pardon. Now you had better return to the ball-room, or they will wonder what has become of you. Good-night."

The apology was not a very graceful one, nor was it delivered by any means in a contrite tone; but, such as it was, Saint-Luc gladly accepted it, and went back to conclude his duties with a somewhat lighter heart. As for Jeanne, she left the house, telling herself that she neither liked the man nor trusted him, but that, upon the whole, she had per-

haps been wrong in letting him see so plainly what her feelings with regard to him were. She had, therefore, offered him her excuses—and what more could be expected of her?

At the door she met Barrington, who came up, hat in hand, and said eagerly, "You won't forget your promise, will you?"

"My promise?" she returned interrogatively. "Oh, you mean about the picture. No, I will not forget, and if the Duchess has no objection, I shall be happy to appear in it. When will you come and make your arrangements? To-morrow? Very well; then we will expect you at breakfast-time—twelve o'clock. Good-night."

She spoke indifferently enough, being at the moment occupied with reflections in which the Englishman and his artistic tastes had no share, but her voice had a perceptibly more friendly ring than that in which she had addressed Saint-Luc; and Barrington, as he lit his cigar, and strolled down towards the town, through scented orange-groves, and under the shade of olives and carob-trees, grey and ghostly in the starlight, laughed triumphantly to himself. "I was sure I should get her to sit to me," he thought. "Really, if people only knew it, the best way to gain anything is to ask for it. Most men don't understand that, and lose what they want because they wait for it to be offered to them. Heavens! what a splendid creature she is, and how mad that poor devil of a Frenchman is about her. I doubt whether *his* asking for what he wants would be of much use; yet he would have a better chance if he came straight to the point with her, instead of throwing himself down at her feet to be trampled upon. I could give him a hint or two, if I wanted him to succeed—only I don't."

CHAPTER VII.

BARRINGTON STUDIES THE PICTURESQUE.

"COLOR," said Barrington sententiously, leaning back in his rocking-chair and pointing with the end of his cigarette to the liquid blue sky above him with lazy approbation—"color is one of the chief delights of existence. It is wonderful how few people realise that

truth. And yet all human beings are more or less under the influence of color, and are made happy by the sight of it, or dispirited by its absence, as they would know if they took the pains to analyse their sensations. The man who has the room next to mine at the Hôtel d'Orient is dying of consumption; his doctor has sent him here, without a single relation or friend, to get well—which he has about as much chance of doing as I have of becoming Pope; and he doesn't speak more than a few words of French, and he doesn't like foreign cooking, and he says the fleas bite him, and he wishes to goodness he was back in England. One can't help taking an interest in one's next door neighbor—though I must say I wish he didn't cough so much at nights; but that is not his fault, poor beggar!—So I generally look in after breakfast and try to cheer him up a little. Well, this morning when I went to see him as usual, I found him sitting at the open window,irling a bunch of violets between his finger and thumb, and whistling as merrily as a cricket. I asked him what made him so cheerful, and he said he really didn't know, unless it was that there was a fine warm sun to-day. Stuff! Take the man's violets away from him, and plant him in his arm-chair in the middle of the Sahara, and do you suppose he would whistle? Not he! I knew, though he didn't, that it was the sight of the cobalt sea and the far-away purple hills, and the Moors in the street below, and the children selling flowers, and of a hundred subtle effects produced by refraction, that was making him happy; and I declare, when I looked at him, I wished with all my heart that his relations would come out here to him, and that he would not live to return to England. One feels nearer Heaven in such a climate as this; and, for my part, I never can understand how it is that there is as much crime in the South of Europe as in the North. Hang it all! you have no *right* to be wicked in a country where Nature is so kind to you. Thanks; I will take just one drop of that green Chartreuse, and then, if you will allow me, I will go and find your sister, and set to work."

Mr. Barrington was sitting in the verandah at the Campagne de Mersac.

Through the open windows of the dining-room at his back might have been seen a deserted breakfast table, whose snowy damask, heaped-up fruit, half-empty decanters, and profusion of flowers formed a combination of color which he had already duly appreciated while rendering justice to the merits of his friend's cook. At his side was a small table, on which stood a silver Moorish coffee-pot, two cups, and a liqueur-decanter, and beyond it, Léon, clad in a complete suit of white duck, reclined in an easy chair, puffing at his cigarette with a somewhat bewildered expression of countenance, having had some difficulty in following the foreign idiom in which the above harangue had been couched.

"One has no right to be wicked anywhere," he observed, with undeniable justice, in reply to the speaker's last words.

"Of course not; but don't you see what a difference surroundings ought to make? A man who at the end of his day's work finds himself in a dismal, filthy street, with the rain chilling him to the bones, and no object that his eyes can rest upon but what is hideous and melancholy, naturally betakes himself to the first place where he can get liquor enough to make him forget his misery—after which he goes home, and, by way of protest against the hopelessness of his existence, knocks his wife down and kicks her about the head.

"I do not think we do that in Algeria," said Léon; "but there are often cases of stabbing, especially among the Spaniards, whose knives are always ready. And as to the climate, you cannot judge of its effects till you have spent a summer here, and have felt the influence of a three days' sirocco upon your nerves. I can assure you that after twenty-four hours of it, you would be capable of taking your own mother by the hair if she irritated you; and, as a fact, there is far more violence at such times than ordinarily."

"Indeed? So it all works round to much the same thing in the end; and there is compensation in everyone's lot—or at least, a grievance, which is still pleasanter. All the same, I don't think I should mind living in Algeria; in fact, I think I should very much like it, and

I am not sure that I wouldn't do it if I were a free man, and hadn't my own poor acres to look after in England. I wonder now whether one could make a small farm here pay its way; it would be an excuse for running over for a few months every year."

Léon shook his head. "You would be robbed," he said. "Even if you lived upon your farm, it is not likely that you would make money by it, and if you were absent it is certain that you would lose a great deal. Besides, the life would not suit you, even for a few months. For me it is different. I have been accustomed to it from a child, and I have no dislike either to the heat or the loneliness of the summer. Some day I will take you out to the little farm where I breed my horses, beyond Kolléah, and we will get up a boar-hunt to amuse you. You will be pleased with it at this season of the year, for it stands high, overlooking the Metidja plain and facing the Atlas mountains, and the air is strong and fresh, and though there is no cultivation just in the neighborhood, you can see the corn-fields and orange-groves beneath you, and the white houses of Blidah far away under the opposite hills; but in summer it is melancholy enough. Then the whole country is parched and burnt brown; there is generally a mist over the mountains, and most people find the silence oppressive. Nevertheless old Pierre Cauvin and I generally spend three weeks or so there in August, and sometimes Jeanne comes with us, and then we are as happy as children. Early every morning, and again at sunset, we gallop over the country for miles, and the young horses follow us in a troop, squealing and kicking up their heels, and we feel as if the whole world belonged to us. Ah, that is the life! I like the world and society and amusement, but I don't think I ever enjoy myself so well as when I am quite free, and away from civilisation. I suppose living so much among the Arabs has made me a little of a savage at heart. Jeanne, Mr. Barrington says he would like to buy a farm in Algeria, and I tell him he would lose his money if he did, and would hate the country and the climate into the bargain. It is not everyone who can transform himself into a Bedouin like you and me, *ma sœur*."

Léon had spoken in his own language, but Jeanne, who now showed herself at the window, with Turco at her side, turned to Barrington with a bright smile and addressed him in English, which she spoke quite correctly, but with just enough of foreign accent to lend it a charm not its own.

" You really think of buying land here ?" she said. " How delightful that would be !"

Barrington was so much pleased and flattered, that if Léon had offered to sell him a few hundred acres offhand, he would very likely have consented to the bargain then and there; but before he had time to reply, Jeanne broke into a laugh at the absurdity of her own notion. " Of course you were not speaking seriously," she said. " Algiers is pleasant enough in the winter time, and when you have a comfortable hotel to lodge in; but to live in one of our rough farm-houses—that is another thing ! I think you would not remain with us long. Now, when will you begin your picture ?"

" Whenever you are ready," answered Barrington. " I thought, if you did not mind taking up your position in that chair at the end of the verandah, I might station myself in the garden below, so as to get in the marabout, which is really the most characteristic part of the house."

It was the house that this artful schemer had requested permission to delineate. He represented himself as an enthusiastic admirer of Moorish architecture, and only suggested as an innocent afterthought that a portrait of Mademoiselle de Mersac, seated on the balcony, would add life to his picture. He went off in search of his materials, and, on his return, found that he was likely to have a *tête-à-tête* interview with his fair model, Léon having slipped away to look after his farm duties.

" So much the better ; two is company, three is none," he thought, as he set up his easel within a few feet of the carved balustrade beside which Jeanne was sitting in a low chair, Turco resting his great head on her knee, and blinking lazily from his shady position at the painter out in the sunshine.

" Surely you are placing yourself too close," Jeanne said, turning to look

down upon him ; " you will only be able to take a very small corner of the house from where you are sitting."

" It is only a very small corner that I want," replied Barrington, without hesitation. " As far as general effect goes, these Moorish buildings are not striking ; their beauty lies in their carved wood-work and arabesques and marble pillars, and, and, and—in detail, in short. If I were a dozen yards away, I couldn't possibly do justice to the detail—don't you see ?"

" Could you not ? I am very glad, at all events, that you are obliged to approach so near, for now we can talk," said Jeanne, unsuspectingly. " I am anxious to hear what you think of our little colonial society. Did you enjoy yourself last night ?"

" Immensely," answered Barrington with a strong emphasis on the word. " I don't know when I have enjoyed a ball so much. Would you mind turning round a little, so that I may get your face quite in profile ? I shall have to take one or two sketches before I begin the picture itself. Thank you very much. How could I do otherwise than enjoy myself when—when everybody was so kind and hospitable ? And you—were you tolerably well amused ?"

" Oh, yes," answered Jeanne, a slight cloud coming over her face, " it was very pleasant—at least for part of the evening. I got a little tired of it towards the end ; but I am not very fond of balls."

" I am afraid you must have repented of your kindness in giving me the cotillon," said Barrington, executing a few rapid strokes, and surveying the result with his head thrown back. " I am not a first-rate waltzer, I know."

" First-rate, no !" answered Jeanne, candidly ; " but you dance very well—remarkably well, indeed, for an Englishman. Besides, I am not exacting."

" I suppose we English are a clumsy people," remarked Barrington, with just a tinge of disappointment in his tone—for indeed he was considered an excellent dancer both in his own county and in London—" our education does not include a great many useful little accomplishments. As for me, I have perhaps had rather more advantages than other fellows—not that I am conceited about

it, or anything of that kind, you know—still I did learn to dance at Vienna."

"Did you?" said Jeanne, stroking Turco's head and gazing absently out to sea. "The Austrians are the best waltzers in the world, are they not?"

She was evidently so little interested in the subject that Barrington did not think it worth while to reply to her last question, and returned to his sketch with an uncomfortable impression of having vaunted himself without effect.

There was a silence of nearly five minutes, which Jeanne broke at last by taking up the conversation exactly where she had left it.

"You do not care to be thought a good dancer, do you?" she asked.

"I? Oh, I don't know—yes, I think I do. One always likes to do everything as well as one can."

"But dancing is such an effeminate thing! For women it is very well, but men have so many better ways of distinguishing themselves. I like Englishmen, because they are more manly in their amusements than Frenchmen. A man ought to be a man; and that is why I always tell Léon to imitate the English in everything except—except in a few small particulars. He talks a great deal about your riding and shooting, and says you are *de première force* in everything of that kind."

"Oh dear no! I don't think I am really what you could call good at anything. I can shoot pretty fairly some days, but not by any means always; and shooting, I believe, is my chief accomplishment. You see an idle man is bound to take up all sorts of different pursuits, and it would be odd if he couldn't succeed in any of them. I am a Jack-of-all-trades and master of none, as we say in England. Your brother thinks me a wonderful fellow because I can speak French and play the piano and paint a little; but your brother, I fancy, is rather inclined to magnify the talents of his friends. He is a little enthusiastic, isn't he?"

"Léon? Yes, a little: he is young," answered Jeanne in a tone of kind toleration, as though she and youth had nothing in common.

"At his age," resumed Barrington, with that sententiousness which some of his friends occasionally found rather try-

ing, "one receives impressions rather than forms judgments. A lad of twenty or twenty-one seldom sees far below the surface, and is very apt to make friends with associates who may do him incalculable harm before he finds them out."

"You are not speaking of yourself, I suppose?"

"Well, no; I do not push modesty quite so far. But frankly, I do think that your brother is getting into a set here which is not likely to do him any good. I hope I don't offend you by saying so."

"Not at all; on the contrary, you would do me a great kindness if you would tell me in what way you think he is in danger. He is his own master now," said Jeanne with a half sigh "but I have still more power with him, I believe, than any one else."

"Exactly. I knew that, or I should not have ventured to broach the subject. The fact is that, if I were you, I should try to keep him away from that fellow, Saint-Luc."

"You do not like M. de Saint-Luc?"

"No; I dislike him particularly. But it is not a question of liking or disliking. He might be the pleasantest fellow in existence, and yet a very bad companion for a lad just entering the world. He belongs to a class which I happen to know something of, and which includes a great many very agreeable and entertaining people; only unfortunately they have not got a vestige of a principle among them. The first time I saw M. de Saint-Luc, I knew at once what he was—a man who would do anything, except perhaps cheat at cards."

"I don't think he means any harm to Léon," said Jeanne, who had a dislike to speaking ill of the absent.

"Means!—well, possibly not; but example is more powerful than intention. Then there is Madame de Trémontville. From the little I saw of her, she is another person whom I should be inclined to warn any young brother of mine against."

"Why do you say that?" asked Jeanne sharply, wheeling round in her chair, and facing Mr. Barrington with an anxious look, which he saw, though he pretended to be still occupied with his work.

"I have no special reason," he an-

swered—"I am afraid I must trouble you to place yourself in the same position that you were in just now. Thank you very much. I have no particular reason for condemning Madame de Trémouville; but for all that you may take my word for it that she is not a safe friend for an impressionable young man. When you joined us, he was saying how he enjoyed life at his farm in the country; if I were you, I would induce him to go out there now for a change of air."

"He would not do that," answered Jeanne. "And, besides, he has been so long away that we could not spare him again just at present. But it is kind of you to take an interest in him," she added, after a pause, "and I shall think over what you have said."

She dismissed the subject as a queen dismisses an audience; and Barrington, amused though he was by her unconscious imperiousness, was not bold enough to say any more. He worked on silently at the rough sketch which he had begun, indulging himself, from time to time, with a furtive study of the beautiful, composed face which showed no consciousness of his scrutiny. "I wonder what her future will be," he mused. "Not an altogether happy one, I should hope; I doubt whether happiness would be becoming to her. Those great melancholy eyes and that calm sweet mouth were made to triumph over adversity, not to lose their meaning in commonplace domestic bliss. Imagine her married to a fat Frenchman, and the mother of three or four squalling brats with cropped heads—oh, odious thought! No; she must have some more exciting—more romantic history than that. I think I should prefer her to remain unmarried—perhaps have an unfortunate attachment in early life, so as to subdue her a little, and soften down that occasional hardness of manner which is her one defect. Then she must have her share of trouble—that, no doubt, will be provided by our young friend Léon—and gradually withdraw from the world, giving herself up more and more to good works. Of course her house will always be open to receive an old friend, though—that I shall certainly require of her, and—"

At this juncture the subject of his day-dream interrupted him by remarking—

"It is very tiring to sit so long in the same attitude. Can you not draw the balcony for a few minutes, and allow me to move? Ah, here is M. de Fontvieille. *À la bonne heure!* Now I shall be obliged to get up and shake hands with him."

Old M. de Fontvieille, who had just appeared round the corner of the house, came forward, holding in his hand the broad-leaved Panama hat which the exigencies of the climate compelled him to wear rather against the grain. In the town, or when paying visits of ceremony, he affected the tall, very tall black hat of a bygone period of fashion, and at all times and in all places the rest of his costume was a model of scrupulous neatness.

His erect and dapper little figure was evidently not unacquainted with artful appliances in the shape of stays and padding; his tightly-fitting grey trowsers were strapped under a tiny pair of boots, so highly polished that it was impossible to look at them, on a sunshiny day, without blinking; and his grey moustache and imperial were carefully waxed.

As he bent over Jeanne's outstretched hand, he threw up at her one of those languishing glances which had done terrible execution in the days when the world was forty years younger. They were innocent enough now, those speaking looks from eyes which age had long since dimmed, and were meant to express nothing more than that respectful homage which M. de Fontvieille had never in his life failed to render to any member of the fair sex, whether old or young, plain or pretty. The old gentleman had retained the manner, as well as the costume, of a youth which had been prolonged beyond the limits of middle age, and ogled grandmothers and grandchildren with perfect impartiality.

"I have been paying my respects to Madame la Duchesse," he said; "and I have made her promise to come out into the garden shortly to enjoy this divine sunshine. She left me in the drawing-room, saying that she would put on her bonnet and return in two minutes. I waited for her half an hour, and then, as I was beginning to tire of my own company, I thought I might venture to step round and wish you good-morning. So you are about to be immortalised,

Jeanne? Will you do me the honor to present me to monsieur?"

Barrington rose and bowed, as Jeanne made the requested introduction, and M. de Fontvieille bent his grey head till it was almost in a line with his knees, and brushed the gravel with a backward sweep of his Panama hat.

" You are an amateur artist, monsieur?" said the elder gentleman. " I envy you your talent: you are in a country which should be the paradise of artists; and you have a magnificent landscape before you. May I be permitted to glance at your canvas?"

" Certainly," answered Barrington, standing back to allow the other to approach his easel; " but it is not precisely the landscape that I propose to paint. As you see by the rough sketch before you, I am attempting nothing more ambitious than a *souvenir* of this exquisite old building; and mademoiselle has very kindly consented to let me have a likeness of herself in the foreground."

" Ah, I perceive," said the old gentleman, peering inquisitively at the outline through his double eye-glass—" a study of the Campagne and mademoiselle; or perhaps I ought rather to say, of mademoiselle and the Campagne. Both charming subjects, monsieur, and I admire your taste in having accorded the largest portion of your space to the more deserving of the two."

" Mademoiselle is in the foreground," began Barrington explanatorily.

" Naturally. It would have been impolite to place her anywhere else," returned M. de Fontvieille, with a twinkle in his eye. " Do you paint in oils or in water-colors, monsieur?"

" In oils."

" Ah! and that requires many sittings, does it not?—a picture in oils."

Barrington answered vaguely that it was impossible to fix in advance the time required for the completion of any picture; and then, to his relief, the Duchess joined the group, leaning upon her stick, and M. de Fontvieille desisted from his queries.

The two old people went away together presently, and began a steady, slow promenade up and down over the gravel walks, while Barrington returned to his work, and Jeanne to her reflections.

" And how does the *affaire* Saint-Luc progress?" enquired M. de Fontvieille, as soon as he and his old friend were out of earshot.

The Duchess made a grimace. " As far as I can see, it does not progress at all," she answered. " You know how perverse Jeanne is; it is mere waste of time and temper to attempt to influence her. Happily M. de Saint-Luc is of a very patient disposition; and, moreover, he is desperately in love with the girl. I trust in time, and say nothing; but I wish the matter could be settled one way or the other. At my age, Time is an uncertain friend; I may have to part with him for ever before I am a year older, and then what is to become of Jeanne? Ah, the poor old Marquis! If he had not taken it into his head to marry an Englishwoman, how much trouble we might all have been spared!"

" Jeanne, for one, would have been spared the trouble of existence," observed M. de Fontvieille. " Her father's marriage may have been no blessing for her; but it has provided you and me, madame, with an interest for our old age. Does M. de Saint-Luc come here often?"

" No, not very often. He is ceremonious, and will not visit us without an invitation. Certainly he is invited tolerably frequently; but then, you understand, it is I who ask him, and he is not always well received."

" It is a pity," remarked M. de Fontvieille, meditatively, with a glance in the direction of the house, where Barrington and Jeanne were to be seen apparently engaged in animated conversation—" it is a pity that M. de Saint-Luc is not an artist."

" Ah, bah!" returned the Duchess, following his look and his thought; " there is no danger. Jeanne, if she is deficient in some good qualities, has at least that of common sense; and that Mr. Barrington (who *par parenthèse*, is a much better informed and more agreeable person than most of his compatriots) is no longer young enough to make a fool of himself. Everybody knows that mixed marriages always end in misery. If, however, you have any fears," she added with a short sardonic laugh, " I will tell Jeanne that the Englishman is an excellent *parti*, and that I have a high

opinion of him. That will dispose of him effectually."

" He is rich, they say."

" My dear monsieur, of what are you dreaming? If he had all the wealth of the Rothschilds, do you suppose that would make any difference? No, no! we have had enough of English marriages in the de Mersac family. But I tell you there is no danger at all. Come, let us talk of something else. I am weary of vexing myself, night and day, with the question of Jeanne's future."

" The future? My dear madame, we have reached an age—you and I—at which most mortals cease to have any control over future events, and retain very little over present ones. We have acted our part and said our say in this world, and must now stand aside to make room for a younger generation. All that we can do is to offer good advice—which we may be pretty sure will not be accepted. Did you act upon advice when you were young, madame? For my part, nothing short of coercion had any influence upon me; and Jeanne is not precisely a person to be coerced. Why, then, vex yourself? Jeanne will take her own way, and very likely it will not be a bad way. Only, if I were in your place, and if I were determined that she should marry M. de Saint-Luc, I should seriously recommend that gentleman to develope a talent for drawing. But I see that the subject is displeasing to you; pardon me if I have been indiscreet in pursuing it." M. de Fontvieille stood still in the gravel path, took off his hat, and bowed profoundly as he made this apology.

" Will you come now and see my sapphires?" he continued. " They are good stones—that I know; but I want the benefit of your taste as to the best setting for them."

M. de Fontvieille had for some years been the tenant of the neighboring villa, which the Duchess had taken upon her first arrival at Algiers, and which she had occupied up to the time of the old Marquis's death. He had filled the house with curiosities and works of art of one kind and another, being a well-to-do old gentleman, and having some difficulty in disposing of the superfluity of his income; but his chief craze was his collection of precious stones. These,

the possession of which was doubly dear to him by reason of many a well-remembered haggle and protracted bargain preceding their purchase, he kept in certain strong boxes fitted for that purpose, with velvet-covered trays, and exhibited, with just pride, to appreciative friends.

" What? More gems?" cried the Duchess. " You will ruin yourself, my friend; and, one of these fine mornings, your servant will murder you, and run away with your treasures. I will see the sapphires though: I am not too old to take delight in looking at pretty things."

So the two old people disappeared from the garden; and were a considerable time absent; for, once the boxes were unlocked, neither of them could resist going through the entire collection. When they returned, the western sky was flooded with a glow of orange light, upon which tiny golden cloudlets floated; the flower-beds were barred with long black shadows from the cypresses, and the air was sharp with the chill which in southern latitudes invariably heralds the sunset. Jeanne had left her post in the verandah, and was standing beside the artist, who had already packed up his easel, paint-box, and other belongings.

" Mademoiselle is going to introduce me to her live stock," said the latter.

" Oh, indeed," answered the Duchess. " Are you fond of animals, Mr. Barrington?"

" Devoted to them."

" *Ma foi!* then I envy you your taste. If I could share it my life would be far pleasanter than it is; but unluckily for me I have never had any love for menageries. That dog Turco is bad enough: he keeps me in constant terror by his habit of bouncing out unexpectedly from behind doors, and oversetting the unwary; but he is an angel in comparison with the wild boar, or with Jeanne's jackal, whom we call Jérémie on account of his ceaseless lamentations. Do you know what it is, monsieur, to be kept awake, the whole night through, by the howling of a jackal? But of course you do not. If a jackal howled under your window, you would take a gun, in the course of five minutes, and go out and kill him. That is also what I should do if I were a man; but being only an old woman, and timid of firearms, I have to

lie still, and listen to the senseless cries of that evil beast till I'm almost maddened, and—”

“ I had no idea that you could hear him on your side of the house, madame,” interposed Jeanne, apologetically. “ If he disturbs you, we will send him away into the country.”

“ Useless, dear child ! His empty kennel would remain, and neither you nor Léon would allow it to stand long unoccupied. I prefer present known evils to future indefinite ones. Would you believe, monsieur, that we once had a hyæna chained in the backyard for three days ? On the fourth day he broke loose, and was found at night scratching at the graves in the church-yard. Imagine what a scandal ! He was summarily put to death. As for that depraved Jérémie, I have become accustomed to him after a fashion ; and how do I know what his successor might be ? Very probably a porcupine, who would wander about the house, and who would be sure to take a delight in remaining motionless whenever I entered one of those dark rooms, so that I might take him for a divan, and seat myself upon him. But I must not keep you standing any longer in this chilly air. You will excuse me, I am sure, if I do not offer to accompany you to the yard.”

And so the old lady vanished through the doorway, followed by M. de Fontvieille, who, after a moment's hesitation between dread of rheumatism and doubt as to the prudence of leaving Jeanne alone any longer with the Englishman, found the former consideration the weightier of the two, and yielded to it accordingly.

Barrington was very willing to excuse both the old people. He followed Jeanne across the courtyard to the stable, whose tenants squealed and hinnied, as only Arab horses can, at the entrance of their mistress ; was presented to the unattractive Jérémie, to the wild boar, to numerous dogs, and finally to a pair

of beautiful soft-eyed gazelles, the male of whom no sooner espied the stranger than, with a grunt of defiance, he put his head down, dashed at him like an express train, and would probably have succeeded in producing a humiliating catastrophe, had not his mistress caught him deftly by the horns in mid-career, and held him captive in her strong white hands.

Shortly afterwards Barrington took his leave, having obtained permission to return on the following day, and set to work in earnest upon his picture.

In a letter which he addressed, about this time, to the same friend at whose correspondence we have already had a glimpse, occurs, *inter alia*, the following passage :—

“ It is a great mistake to suppose, as many people do, that feminine beauty of form consists solely in rounded outlines, and that any appearance of strength is a defect in a woman. I hate fat arms, and flabby, dimpled, powerless hands. Nature no more intended hands and arms to look like that than she intended a prize pig to be so heavy that his legs will not support his weight. Women ought to be able to use their limbs freely. And if ever you meet a beautiful girl with strong wrists in whom you feel an interest, take my advice and buy her a gazelle—or if you can't get a gazelle, perhaps a billy-goat might do. Encourage the beast to charge at her, and teach her to catch him neatly by the horns when he is going full tilt. Of course he will bowl her over as clean as a whistle at first, but she mustn't mind that. Once she has acquired the knack of seizing him at the right moment, she will find the result will be worth any bruises he may have given her in teaching her the lesson ; and it will be worth ten times the money you have paid for him to see the picture the girl will make as she holds the struggling brute in a perfectly firm grasp, but without any unbecoming exertion.”—*Cornhill Magazine*.

WHY DO WE EAT OUR DINNER?

BY GRANT ALLEN.

EARLY last year a paragraph went the round of the papers, to the effect that a large female anaconda snake, in the reptile house at the Zoological Gardens, after a fast of a twelvemonth, had at length been induced to kill and swallow a duck. This very touchy and vindictive lady, it appears, had taken such grave offence at her capture in her South American home, and at her subsequent compulsory voyage to Great Britain, that she sulked persistently for a whole year, and invariably refused the keeper's most tempting offers of live rabbits or plump young pigeons. Month after month she lay passive in her cage, with her heart beating, her lungs acting, and all her vital functions proceeding with the usual slow regularity of snake life ; but not a mouthful of food did she attempt to take, and not a single fresh energy did she recruit from without to keep up the working of her animal mechanism. As I read this curious case of a genuine 'fasting girl' in my 'Times' one morning, the thought struck me forcibly—Why, after all, should we expect her to feed ? Why should she not go on for ever without tasting a morsel ? In short, why should we eat our dinner ? And I set myself to work at once to find out what was the general opinion of the unscientific public upon this important though novel question.

Singularly enough, I found that most people were content to eat their dinner in a very unreasoning and empirical way. They had always been accustomed to dine daily from their childhood upward, they felt hungry at the habitual dinner-hour, and they sat down to their five courses with an unquestioning acceptance of the necessity for feeding to prevent starvation. But when I inquired *why* people who did not eat should starve, *why* they should not imitate the thrifty anaconda, and take one meal in a twelvemonth instead of three in a day, they appeared to regard my question as rather silly, and as certainly superfluous. Yet I must confess the query seems to me both pertinent and

sensible ; and it may be worth while to attempt some answer here in such language as can be understood of the people, without diving into those profound mysteries of formulæ and equations with which physicists love to becloud the subjects of their investigation.

A still more startling case than that of the anaconda will help to throw a little light upon the difficult problem which we have to solve. An Egyptian desert-snail was received at the British Museum on March 25, 1846. The animal was not known to be alive, as it had withdrawn into its shell, and the specimen was accordingly gummed, mouth downwards, on to a tablet, duly labelled and dated, and left to its fate. Instead of starving, this contented gasteropod simply went to sleep in a quiet way, and never woke up again for four years. The tablet was then placed in tepid water, and the shell loosened, when the dormant snail suddenly resuscitated himself, began walking about the basin, and finally sat for his portrait, which may be seen of life-size in Mr. Woodward's 'Manual of the Mollusca.' Now, during those four years the snail had never eaten a mouthful of any food, yet he was quite as well and flourishing at the end of the period as he had been at its beginning.

Hence we are led to the inquiry—What is the actual function which food subserves in the human body ? Why is it true that we must eat or we must die, while the snake and the snail can fast for months or years together with impunity ? How do we differ from these lower animals in such a remarkable degree, when all the operations of our bodies so closely resemble theirs in general principle ?

Everybody has heard it said that food is to men and animals what fuel is to a steam-engine. Everybody accepts this statement in a vague sort of way, but until the last few years nobody has been able really to explain what was the common feature of the two cases. For example, most people if asked would answer that the use of food is to warm

the body, but this is really quite beside the question ; because, in the first place, the use of fuel is not to warm the steam-engine, but to keep up its motion ; and, in the second place, many animals are scarcely perceptibly warmer than the medium in which they live. Again, most people show in every-day conversation that they consider the main object of food to be the replacement of the *materials* of the body ; whereas we shall see hereafter that its real object is the replacement of the *energies* which have been dissipated in working. Indeed, there is no more reason why the materials of an animal body should waste away of themselves, apart from work done, than there is for a similar wasting away in the case of a mineral body such as a stone. When an animal does practically no work, as in the instance of our desert-snail, his body actually does not waste, but remains throughout just as big as ever. So we must look a good deal more closely into the problem if we want to understand it, and not rest content with vague generalities about food and fuel. Such half-knowledge is really worse than no knowledge at all, because it deludes us into a specious self-deception, and makes us imagine that we comprehend what in fact we have not taken the least trouble to examine for ourselves.

Let us begin, then, by clearly realising what is the use of fuel to the steam-engine. Obviously, you say, to set up motion. But where does the motion come from ? 'From the coal,' answers the practical man, unhesitatingly. 'Well, not exactly,' says the physicist, 'but from the coal and the air together.' All energy or moving power, as we now know, is derived from the union of two bodies which have affinities or attractions for one another. Thus, if I wind up a clock, moved by a weight, I separate the mass of lead in the weight from the earth for which it has the kind of affinity or attraction known as gravitation. This attraction then draws together the weight and the earth ; and in doing so, the energy I put into it is given out as motion of the clock. Similarly with coal and air : the hydrogen and carbon of the coal have affinities or attractions towards the oxygen of the air, and when I bring them together at a

high temperature (of which more hereafter) they rush into one another's embrace to form carbonic acid and water, while their energy is given off as heat or motion of the surrounding bodies. We might have whole minefuls of coal at our disposal ; but if we had no oxygen to unite with it, the coal would be of no more use than so much earth or stone. In ordinary life, however, the supply of oxygen is universal and abundant, while the supply of coal is limited ; and so, as we have to lay in coals, while we find the oxygen laid in for us, we always quite disregard the latter factor in our fires, and speak as though the fuel were the only important element concerned. Yet one can easily imagine a state of things in which oxygen might be deficient ; and in a world so constituted it would have to be regularly laid on in pipes, like gas or water, if the people wished to have any fires.

All energy, then, is derived from the separation of two or more bodies having affinities for one another. So long as the bodies remain separate, the energy is said, in the technical slang of physics, to be *potential* ; as soon as the bodies unite, and the energy is manifested as motion, it is said to be *kinetic*. But these words are rather mystifying to ordinary readers, and frighten us by their bigness and their abstract sound ; so I shall take the liberty of altering them for our present purpose to *dormant* and *active* respectively, which are terms quite as well adapted to express the meaning intended, and not half so likely to land us in an intellectual *cul-de-sac*, or to envelop us in a logical fog. When we take a piece of coal and a lot of free oxygen, we possess energy in the dormant state. But though the oxygen has strong attractions for the carbon and hydrogen, they cannot unite, because their atoms do not come into close contact with one another, and because the two last named substances are bound up in the solid form of the coal. We might compare their condition to that of a weight suspended by a string, which has strong attractions towards the earth, but cannot unite with it till we cut the string. Just analogous is our action when we apply a match to the coal. The heat first disintegrates or disunites little atoms of the hydro-carbons which

make it up, and sets them in a state of rapid vibration among themselves. This vibration brings them into contact with the atoms of oxygen, which at once unite with them, causing a fresh development of heat, and a liberation of all the dormant energy, which immediately assumes the active form. The carbonic acid and water (or steam) thus produced fly up the chimney, carrying with them the little bits of unburnt coal which we call smoke ; and a current of fresh oxygen rushes in to unite with the fresh atoms of hydrogen and carbon which have been disengaged by the energy liberated from their fellows. So the process continues, till all the coal has been converted into carbonic acid and water —of course by the aid of a corresponding quantity of oxygen—and all the energy has been turned loose as heat upon the room in which we sit and upon the air outside.

In the case of an ordinary fire, where warmth is the single object we have in view, we only think of the heat, and disregard the other aspects of the process. But it is clear that an enormous amount of motion has also been set up by the energy of the free coal and oxygen, as exemplified by the draught up the chimney, and the numerous currents of air produced by its action within and without the room. Now, in a steam-engine we deliberately make use of this motion for our own purposes by a specially-devised mechanism. We allow the fire to heat and expand the water in the boiler, thus transferring to its molecules the separation which formerly existed between the atoms of the coal and the oxygen. Then we make the expanded water or steam push up the piston, and we connect the piston in turn with a crank which sets in motion the wheels, and so passes on the active energy to the mill, train, or ship which we desire to move, as the case may be. Thus the dormant energy of the coals and oxygen is liberated in the active state by their union, and is finally employed to effect movement in external bodies by the inter-mediation of the boiler. Even then, the energy does not disappear : for energy, like matter, is indestructible ; but it merely passes by friction as heat to that wonderful surrounding medium which we call æther, and is dissipated into the

vast void of space, no longer recoverable by us, though quite as really existent as ever.

In what way, however, has all this to do with the reason for eating our dinners ? Simply this. Men and other animals may be regarded from the purely physical point of view as a kind of conscious locomotive steam-engine, with whom food stands in the place of fuel, while the possible kinds of movement are infinitely more varied and specialised. I do not mean to advance any of those 'automatic' theories which have been so current of late years. Whether they are true or false, they have nothing to do with our present subject. I only want to put in a plain light an accepted scientific truth. Men differ enormously from steam-engines in their possession of consciousness, wills, desires, pleasures, pains, and moral feelings ; but they agree with them in the purely physical mechanism of their motor organs. A man, like a steam-engine, cannot move without his appropriate fuel ; and if the fuel is not supplied, the fire goes out, and the man dies. The exact manner in which the materials are utilised for keeping up this vital flame is the question to which we must now address ourselves.

Food-stuffs and coal agree essentially in the chief characteristics of their chemical constitution. Both consist mainly of hydrogen and carbon, and both possess energy in virtue of the fact that their affinities for oxygen are not satisfied. Water contains hydrogen, and carbonic acid contains carbon ; but we can get no motion out of these, because in them the oxygen has already united with the atoms for which it had affinity, and the separation necessary for dormant energy has ceased to exist. But in bread, meat, potatoes, or coal, the hydrogen and carbon remain in their free state, ready to unite with oxygen whenever the chance is presented to them. All alike obtained their energy in the same way. The rays of sunlight falling upon the leaves of their original trees or plants separated the oxygen from the water and carbonic acid in the air, and built up the free hydro-carbons in their tissues. The energy which they thus drank in has remained dormant within them ever since : in the case of

the bread for a few short months, in that of the coal for countless millions of geological cycles. But, however long it may have rested in that latent form, whenever an opportunity occurs, the atoms will reunite with oxygen, and the energy will once more assume the active shape. There is really only one serious difference between coal and food, and that is that most foods contain another element, nitrogen, as well as carbon and hydrogen ; and this nitrogen is an absolute necessity for the animal if it is to continue living. But there are good reasons for suspecting that nitrogen is not itself a fuel, being rather analogous in its nature to a match, and having for its business to set up the first beginnings of a fire, not to keep the fire going when it has once been lighted. So that this apparent difference of kind is really seen to be unimportant when we get to the bottom of the question.

The various matters which an animal eats consist of pure food-stuffs and of useless concomitant bodies : just as coal consists of pure fuel and of the useless mineral matter known as ash. When an animal eats his dinner, the process of digestion and assimilation takes place, and has the ultimate result of separating the pure food-stuffs from the useless concomitants. The latter bodies are rejected at once ; but the food-stuffs are taken up by his veins, incorporated with the blood (which consists of food in different degrees of combustion), and used for building up the various portions of his body. Supposing the animal were a mere growing object like a crystal, with no work to perform and no consequent waste of material, the process would stop here, and the creature would wax bigger and bigger from day to day, without any alteration in place or redistribution of assimilated matter. But the animal is essentially a locomotive machine, and the purpose for which he has taken in his food is simply that he may use it up in producing motion. For a while he stores it away in his muscles, or lays it by for future use as fat ; but its ultimate destination in every instance is just as truly to be consumed for fuel as is the case with the coal in the steam-engine.

The food, however, only gives us one half of the necessary materials for the

liberation of dormant energy. Oxygen is needed to give us the other half. This oxygen we take in whenever we breathe. Animals like fishes or sea-snails obtain the necessary supply from the water by means of gills ; for large quantities of oxygen are held in solution by water, and the needs of such comparatively sluggish creatures are not very great. With them, a little energy goes a long way. Air-breathing animals like ourselves, on the other hand, need relatively large quantities of the energy-yielding gas in order to keep up the constant movements and high temperature of their bodies. Such creatures accordingly take in the oxygen by great inhalations, and absorb it in their lungs, where it passes through the thin membrane of the capillaries, or very tiny blood-vessels, and so mixes freely with the blood itself. Thus we have food, supplied to the blood by the stomach, the exact analogue of the coal in the engine ; and oxygen, supplied to the blood by the lungs, the exact analogue of the draught in the engine. Whenever these two substances—the hydro-carbonaceous foods and the free oxygen—reunite, they will necessarily give out heat and set up active movements.

The exact place and mode of their recombination we cannot yet be said to fully understand. But even if we did, the details would be sufficiently dry and uninteresting to general readers ; and we know quite enough to put the subject in a simple and comprehensible form before those who are willing to accept the broad facts without small criticism.

We may say, then, that the energies of the body are used up in two principal ways—automatically and voluntarily. The automatic activities are produced by the steady and constant oxidation of some portion of the food-stuffs in the blood and tissues. As this oxidation takes place, it sets up certain regular movements, which compose what is (very incorrectly) known as the vegetative life in animals. There are an immense number of these movements always going on within our bodies, quite apart from our knowledge or will. Such are the beating of the heart, with the consequent propulsions of blood through the system ; the exhalations and inspira-

tions of the lungs, which supply us with the oxygen for carrying on these processes ; the act of digestion and assimilation ; and many other minor functions of like sort. But just as in the case of the steam-engine, so in the human or animal body, the union of the oxygen with the hydro-carbons, besides producing motion, liberates heat. This heat keep the bodies of birds, quadrupeds, and human beings, which are all very active in their automatic movements, at a much higher temperature than the surrounding medium ; while reptiles, fishes, and other 'cold-blooded' creatures, having much less energetic motions of the heart and lungs—which of course betokens much less oxidation of food-stuffs—have bodies comparatively little different in warmth from the air or water about them. We thus see in part why it was that the anaconda and the desert-snail could go so long without food ; though we cannot quite understand that question till we have examined the voluntary movements as well. It should be added that, though the latter class of actions also produce heat—as we all know when we walk about on a cold day to warm ourselves—yet the temperature induced by the automatic activities of the body alone is generally sufficient under normal circumstances to keep us comfortably warm. Thus, while we are asleep, only the actions of breathing and the beating of the heart continue ; but the union of oxygen with the food-stuffs to produce these movements suffices as a rule to make bed quite hot enough for all healthy persons ; and if we ever wake up cold after a good night's rest, we may be sure that our automatic activities are not what they ought to be.

The voluntary activities of the body are brought about in a slightly different manner. Directly or indirectly, they depend upon the union of oxygen and food-stuffs within the tissues of our locomotive muscles, the energy so liberated being made use of to bend or extend our bones or limbs in the particular way we desire. The muscles always contain (in a healthy and well-fed person) large quantities of such stored-up food-stuffs ; and the blood supplies them from moment to moment with oxygen which may unite with the food-stuffs whenever occasion demands. But the

union does not here take place regularly and constantly, as in the case of the automatic organs : it requires to be set up by an impetus specially communicated from the brain. That seat of the will is connected with the various voluntary muscles by the living telegraphic wires which we call nerves ; and when the will determines that a certain muscle shall be moved, the nerves communicate the disturbance to the proper quarter, the necessary oxidation takes place, and the muscle contracts as desired. We do not quite know how the nerves and muscles perform these functions ; but it is pretty certain that the nitrogen of our foods plays an active part in the process, and that, as I have already hinted, it acts in a manner somewhat analogous to that of a match. We may suppose, to put the matter in a familiar form, that the will sends down a sort of electric spark* to the muscle ; and that this spark, lighting up the explosive nitrogen, causes an immediate union of the oxygen with the constituents of muscle, and so produces the visible movement.

Of course, voluntary actions, like automatic ones, liberate heat ; but this heat is generally somewhat in excess of what is required for comfort, especially in hot weather. Lower animals, however, which have no fires and no artificial clothing, require it more than we do to keep us warm ; and even we ourselves in wintry weather always feel chilly in the morning until we have had a good brisk walk to set up oxidation, and consequently liberate enough heat to make us comfortable.

Thus all motion, in the animal as in the steam-engine, depends upon the union of oxygen with food or body-fuel. It is true that in the animal body oxygen can unite directly with carbon and hydrogen without the necessity of a high temperature, which we saw was indispensable in the case of the coal, in order to bring the two sets of atoms within the sphere of their mutual attractions. But the difference is probably due to the different condition of the hydro-carbonaceous substances within the animal body ; or else, as others conjecture, to

* I am speaking quite metaphorically and popularly, and do not mean to imply adhesion to the electrical rather than to the isomeric theory of nervous conduction.

the assumption by the oxygen of that peculiar state in which it is known as ozone. At any rate, the two processes do not disagree in any essential particular, being both cases in which free substances, possessing dormant energy by virtue of their separation and their affinity for one another, unite together, and in so doing liberate their energy as heat and visible motion.

There is, however, one important distinction of detail between the mechanism of a steam-engine and the mechanism of an animal body, which gives rise to many of the mistaken notions as to the use of food which we noticed above. In the engine, we put all the coal into the furnace, and burn it there at once; while the piston, cylinder, cranks, and wheels are not composed of combustible material, but of solid iron. In the animal body, on the other hand, every muscle is at once furnace, boiler, and piston; it consists of combustible materials, which unite with oxygen in the tissues themselves, and set up motion within the muscle of which they form a portion. The case is just the same as though the joints of an engine, instead of being quite rigid, were composed of hollow india-rubber and whalebone, with iron attachments; were then filled with coal, oxygen, and water, and possessed the power of burning up these materials internally and setting up motions in the india-rubber tubings. Hence the materials in the muscles are always undergoing change. The carbon and hydrogen which have united with the oxygen are perpetually forming carbonic acid and water;* and, as these have lost or given up all their energy, they are naturally of no more use to the body than the similar carbonic acid and steam which fly up the draught are of use to the engine. Accordingly, they are taken up by the stream of blood as it passes, separated from the useful components of that compound liquid by an appropriate organ, and rejected from the body as of no further service.

But their place in the muscle must

once more be supplied by fresh energetic materials; and these materials are brought to it by the self-same blood which removes the de-energised waste products. And now we begin to see why we must eat our dinners or starve. Every time our heart beats, every time our lungs draw in a breath, a certain amount of matter in the tissues of the muscles which produced those motions undergoes oxidation, and is carried off in the oxidised form to be cast out of the body as waste. Every new pulsation or breath requires a certain new quantity of energetic material, both as food-stuffs and as oxygen; and hence we must supply the one from the stomach and the other from the lungs if we wish to keep the mechanism going. The store of hydro-carbonaceous matters laid by in the body is generally considerable in well-fed persons; for, besides the contents of the muscles themselves, we have usually a large reserve fund in the shape of fat, ready to be utilised when occasion arises. Hence, we can get along for a very short time, if necessary, without food; because we can fall back, first upon the fat-reserve, and then upon the muscles and tissues, for energetic materials. But after a time the ceaseless beating of the heart and movement of the lungs will use up all the available matters, and the blood will cast off the oxidised product and excrete it from the body; till at last no more materials are forthcoming, the whole contents of the tissues have been oxidised and got rid of, and the heart and lungs must perforce cease to act, in which case the unhappy victim is said to have died of starvation. As regards the supply of oxygen, on the other hand, we are very much more restricted in our power of endurance; for we have no large store of this necessary for combustion laid by in our bodies, and if the supply be cut off for a single moment (as by compressing the throat or suffocating with carbonic acid) the heart and lungs must cease at once to act, and death takes place immediately. For of course death, viewed on its purely physical side, means the cessation of that set of activities which results from the union of oxygen with the food-stuffs in the body.

By this time I hope the reader can see

* I purposely simplify and omit details, so as to give the reader a graphic and comprehensible picture of the central facts. So long as essentials are not distorted, a good diagram is far better for educational purposes than an accurate facsimile.

quite clearly what is the necessity for eating his dinner. If we are to live, we must keep up the cycle of our bodily activities, and especially those two fundamental ones, the breathing of the lungs and the beating of the heart. In order to do this, we must supply the muscles employed with the two energy-yielding substances, oxygen and hydro-carbons. The supply of oxygen must be continuous; in other words, we must never for a moment leave off breathing: but the supply of hydro-carbons may be intermittent, though it must be sufficient on the whole to balance waste. We must not regard the object of food, however, as being merely to build up the matter of the body; we must rather consider it as intended to recruit the energies of the body. The more active any creature is, both in its automatic and its voluntary movements, the greater will be the amount of hydro-carbons consumed or used up in its muscles, and the greater, consequently, the amount of food and oxygen which it will require to make up the loss. The tiny humming-bird will need far more food in a year than the great anaconda with which we began our discourse: because the humming-bird has a rapidly-moving heart and lungs, while the cold-blooded snake respires and circulates slowly; and the humming-bird darts about perpetually at lightning speed from flower to flower, while the snake lies coiled up motionless in its blanket from year's end to year's end, or only comes out sleepily now and then to swallow the food which will keep up its vital actions through another long and lazy fast.

The desert-snail, however, can endure much longer without food than even the anaconda, because, like so many other mollusca, it can *hibernate*. This process of hibernation consists in the induction of a state during which the heart ceases to beat, respiration is suspended, and the animal can hardly be said to live at all. But when warmth and moisture are once more applied, the heart recommences its action, the lungs or gills quicken their movements, voluntary locomotion ensues, and the creature sets out again on the quest for food. Something analogous occurs in the case of the bear, the dormouse, and other hibernating quadrupeds; but in

these instances the vital functions continue much more in their ordinary state, and are kept up by the supply of fat which is dissolved by the blood, and consumed in effecting the necessary automatic actions. The bear, which goes to sleep in the autumn as sleek and plump as a prize pig, wakes up in the spring a poor lean wretch, with only just flesh enough to cover his bones, and carry him off in search of fresh food. The much more complicated mechanism of the higher animals requires to be kept always in action; it cannot cease almost entirely, like that of the snail, and then revive again when circumstances become more favorable. Hence hibernating mammals must lay by fat during the summer to keep their principal organs at work during the long winter fast. Yet, even among human beings, cases of 'trance' or 'suspended animation' occasionally occur, during which the cycle of vital actions almost entirely ceases to all appearance for a considerable time, and then begins again on the application of some external or internal stimulus—which latter may be not unaptly compared to the slight shaking which we sometimes give a watch or clock to set it going when stopped by a momentary impediment. Persons recovered from drowning, in whom the cessation of action has been quite sudden and has not affected the structure of their organs, are often thus restored by the judicious use of rubbing and alcohol.

The camel presents a more interesting phenomenon in his well-known humps. These protuberances consist really of reserve-stores of fat, which the camel uses, not only for keeping up the action of his heart and lungs, but also for producing locomotion in his frequent enforced fasts amongst the deserts of Arabia or India. The humps dwindle away as he marches, in a manner exactly similar to that of the bear's fat during his hibernation, only of course much more rapidly, as they have so much more work to perform.

Finally, it may appear strange that the small amount of food we eat should suffice to carry our large and bulky bodies through all the varied movements of the day. But this difficulty disappears at once when we recollect how large an amount of energy can be laid by

dormant in a very small piece of matter. A lump of coal no bigger than one's fist, if judiciously employed, will suffice to keep a small toy-engine at work for a considerable time. Now, our food is matter containing large amounts of dormant energy, and our bodies are engines constructed so as to utilise all the energy to the best advantage. A single gramme of beef-fat, if completely burned (that is, if every atom unites with oxygen), is capable of developing more than 9,000 heat-units ; and each such heat-unit, if employed to perform mechanical work, is capable of lifting a weight of one gramme to a height of 424 metres ; or, what comes to the same thing, 424 grammes to a height of one metre. Accordingly, the energy contained in one gramme of beef-fat (and the oxygen with which it unites) would be sufficient to raise the little bit of fat itself to a height of 3,816 kilometres, or about as high as from London to New York. Again, it may seem curious that the food eaten by the anaconda in South America, and stored up in its tissues, should suffice to keep up the action of its heart and lungs for so many months. But then we must remember that it performed very few other movements, most probably, during all that time ; and if we think how small an amount of energy we expend in winding up an eight-day clock, and how infinitesimal a part of our dinner must have been used up in imparting to it the motion which will keep it swinging and

ticking for one hundred and ninety-two hours, we can easily understand how the large amount of stored-up energy in the snake's muscles might very well serve to keep up its automatic actions for so long a time.

There are five hundred other little points which this mode of regarding our bodies at once clears up. It shows us why we are warmer after eating a meal, why cold is harder to endure when we are hungry, why we need so little food when we are lying in bed inactive, and so much when we are taking a walking-tour or training for a boat-race, why cold-blooded animals eat so rarely and warm-blooded creatures so often, why we get thin when we take too little food, and why we lay on fat when we take too little exercise. But these and many other questions must be passed over in silence, or left to the reader's discrimination, lest I should make this paper tediously long. It must suffice for the present if I have given any of my readers a more rational reason in future for eating their dinners. To be sure, Nature herself has admirably provided that even the most unscientific person should find sufficient internal conviction as to the desirability of dining without the aid of extraneous exhortation ; but it is at least some comfort to know that so universal and so unreasoning a practice is not altogether an unreasonable one as well.—*Belgravia Magazine*.

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CRUEL FATE.

BY MARY F. ROBINSON.

Ah me, why was I born
A girl and not a boy?
I could so well have worn
The larger grief and joy.
My lovers all-forlorn,
My poodle quaintly shorn,
My sweets and sonnets, cloy.
I'm tired of being coy—
Ah me, why was I born
A girl and not a boy?

I should have wound a horn
In Paladins' employ,
Or waited night and morn
Before the walls of Troy.

But mine's a lot to scorn,
 Not even Muse or Norn,
 A trivial modern toy,
 A freak of Fate's annoy ;
 Ah me, why was I born
 A girl and not a boy ?—*Belgravia Magazine.*

ANCIENT EGYPT.

BY REGINALD STUART POOLE.

III.

It was natural that the little Theban kingdom which took the lead in the war of independence should win the undivided rule of Egypt ; but the sudden leap from this limited dominion to the conquest of a great empire is without a parallel in Egyptian history. There are indeed few events outside that history to which it can be compared. It was not due to fanaticism, nor to the desire for pleasanter lands to dwell in, nor to the migratory instinct. The Egyptians never conquered for the sake of spreading their religion ; they were contented with their fertile mother-country, which could easily be extended along the banks of the Nile into the heart of Africa ; and as we know them in the rest of their history, they were slow to move, changing very little in the course of centuries. The nearest parallel in the world's history is the conquest of the Persian Empire by Alexander ; but Alexander took up an enterprise which had been before meditated, and he fought against a worn-out state. The Egyptians started at once a scheme of conquest against vigorous enemies, and though they speedily won, their rule could only be maintained by constant wars, until at last their empire perished from exhaustion, like the second Assyrian Empire which fell with the fall of Nineveh. It may be that the sudden activity of Egypt was a compensation for a long period of inaction ; but whether this be so or not, it is a warning that we must not attempt to apply any supposed law of progress to the development of Egyptian civilization. The Empire of the Egyptians over material forces and artistic forms may have been won far more suddenly than analogy would lead us to suppose.

Early in the reign of Aahmes, head of

the Eighteenth Dynasty, as already shown, the final conquest of the Shepherds was achieved by the capture of their great stronghold Avaris. The second successor of Aahmes, Thothmes I., at the beginning of his reign, set up a tablet on the bank of the Euphrates. Thothmes III., one generation later, subdued Assyria. This summit of power was reached within a hundred years from B.C. 1600 or 1500.

Of the preparations for conquest we know nothing. All the indications of the state of the army under Aahmes and his immediate successor show a force inadequate in numbers to the great enterprises which followed. Not improbably Thothmes I. was the earliest great conqueror ; but of his achievements we know scarcely anything. His daughter Hatasu or Hatshepu, married first to her elder brother Thothmes II., and then regent for the younger, Thothmes III., though not admitted into the ancient Egyptian official lists, largely contributed to the formation of the Empire. During her regency the Eastern tributaries do not seem to have risen, and she had thus leisure to make a naval expedition, of which she has left a record, up the Red Sea to Punt, which was either the Somálee country or Arabia Felix. This was the land of spicery, of precious metals, and of precious stones. The voyage was, it would appear, not so much for conquest as for discovery in the manner of the enterprises in the New World which inaugurate modern history. It shows that the ambition of the Egyptians did not arise only from love of conquest or desire of wide dominion, but was also stirred by the feeling that has moved all great and adventurous nations. The expedition not only subdued the spice-country, but it also secured the emporiums of the merchandise of

India, whose productions in the booty give us a first glimpse of its ancient civilization. Not the least curious result of the expedition was what M. Maspero remarks is the first recorded effort of acclimatization. Thirty-two small spicetrees were brought, packed in earth in baskets, to Thebes, to be there planted (Maspero, *Hist. Anc.* 202, 203). Queen Hatasu was not content to be a woman of daring enterprise : she desired to be king ; and during the minority of Thothmes III. she dressed as a man, appearing on her monuments as the Pharaoh. Her active reign having ended, how we know not, Thothmes III., probably the greatest of the Kings of Egypt, gained the sovereign power.

Up to this date the memoirs of subjects have contributed much to Egyptian history ; from this period onward we have side by side with them royal memoirs. These want, indeed, the simplicity of the humbler records ; they are official and written in the court style, but they usually traverse a larger field, and, so far as the external relations of Egypt are concerned, they are the nearest approach that we have to history. They are, however, one-sided, chiefly recording success, and admitting disaster only to give greater emphasis to subsequent victory. Of these royal memoirs the *Annals of Thothmes III.* are at once the most extensive and the most interesting. From them the story of his great wars has been reconstructed, and we can thus see the causes of the military success and political failure of the Egyptian Empire. On the accession of Thothmes the Eastern tributaries revolted, as on many subsequent occasions, until the Ramessides set their foreign policy on a surer though humbler basis. At this time the dominant race of Syria and Assyria were the Ruten, of whom we can only say that they were Shemites.* Thothmes took the field, and at the Battle of Megiddo, then, as

afterwards, the key to the route from Phoenicia to Assyria, he routed the forces of the Ruten and their allies. A few days later he captured the city. He then received the submission of the chiefs of Syria, Mesopotamia, and Assyria. Year after year the war began afresh. The King of Egypt penetrated to Assyria and reached Nineveh, where the submission of the inhabitants left the army to enjoy the chase and bring back the spoils of a hundred and twenty elephants slain there.* Every annual expedition was a success, for it returned laden with gold and silver, and the choice products of the industry of the most civilized countries of Asia. It was not a war of desolation, like the wars of the Assyrian kings ; the King of Egypt demanded submission and tribute, but seems neither to have placed Egyptian governors over the conquered territories nor to have made treaties with the tributary chiefs. Thus the work of conquest had nothing permanent in it ; the conquered nations rose again and again, to be subdued but not discouraged. The result to Egypt was a great increase of material wealth and a sure exhaustion of the fighting part of the population. For the rest of the time during which the Eighteenth Dynasty ruled, which may be put roughly at a century and a half, the external relations of Egypt are the same as in the time of Thothmes, but the achievements of the kings are rarely as brilliant as his, and towards the close of the line there are symptoms of weakness.

The chief value of the records of Egyptian conquest is the light they throw upon the state of the civilized world at their remote age. They not only give us such startling glimpses into the unknown as we gain from Queen Hatasu's expedition up the Red Sea, which carries the date of the Indian and Arabian trade to at least five centuries before Solomon, and ten before Darius Hystaspis, but they also enable us to draw up a geographical and ethnological map of Asia east of Egypt as far as the Tigris, according to the Egyptian nomen-

* In the Ruten some have seen the Shemite Ludim, and considered them to be the Lydians in a primitive seat. The Egyptians would, however, probably have written Ludim with signs preferably used for "l" and "d," unless the name had been known to them before the Empire, at a time when transliteration of Semitic words was less precise. It is also probable that the name would have ended in "u" in place of "en."

* This is very interesting in reference to the ancient geographical distribution of the elephant, and as indicating a condition of Assyria that would explain the slow growth of the power of its old monarchy.

clature. It must not be supposed that this map is complete in its details, or that each nation, country, and city can be written down in its right place with the Semitic and classical equivalents. The first step towards this end will have been taken when the later map formed on Assyrian evidence has been compared with it and both with the Biblical data. There are great difficulties in the way of the attempt to attach the Egyptian names to definite tracts ; the identification of towns is easier. The difficulties arise from two causes. At this age the westward flow of nations had already set in. Although then, as since, its strong tide sometimes ebbed or was forced back, yet in the four hundred years during which Egypt was the mistress of civilized Asia, we observe the same territory ruled or occupied by nations of different names. A still harder difficulty arises from the different name given in Egyptian and other geography to the same country or tribe. Egypt itself was usually called by one name by its inhabitants, and by two others by the Shemites and the Greeks, from the age of the Homeric poems downwards, these names being wholly unconnected. Modern geography abounds in such cases, from which students of ancient Oriental geography might take warning.* In spite, however, of all obstacles, great advances have been made, chiefly by the founder of Egyptian geography, Dr. Brugsch. It is of special advantage that the information gained is ethnologically correct. We can determine from the characteristic pictures of the monuments to what race each nation belonged. Thus the gain, though far from complete, has a truly solid value.

The sudden growth of Egypt in foreign dominion is marked, as one would expect, by as sudden a growth of luxury at home. In scale and costliness the temples now assume new proportions, almost the greatest attained in Egypt, only to be surpassed under the Rames-sides. The whole character of private life is changed, and in viewing the pictures of the tombs we see a sharp transi-

tion from patriarchal simplicity to civic splendor, in manners, in dress, and in all the surroundings of life. The liberties of the upper classes do not seem to have gained by the change. Certainly the old aristocracy, as it was under the Twelfth Dynasty, is at first traceable, but it soon disappears, and all posts are held by court favor between soldiers, priests, and a growing official class, whose power is, as always, a sign of national decay.

Thebes was the capital of Egypt under the Empire. The great temple of Amen-ra, now called after the village of El-Karnak, was its central edifice. The chief object of each of the earlier kings of the Eighteenth Dynasty was to adorn this temple, and no one failed to add something to its long succession of halls and chambers. The traveller who begins his examination in the inner rooms, and advances towards the stupendous winged portal, never completed, which looks to the Nile, can perceive the history of almost each reign and in some degree measure by its records both its length and its prosperity. If he would know the private life of the Egyptians, he must cross to the western bank of the river, and see what still remain of the beautiful frescoes which till lately covered the walls of the tombs which honey-combed the rocks. It will aid students at home to know that the copies of most of the scenes of luxurious private life, of banqueting, of the music and dancing of hired performers, and of costly furniture, are taken from the Theban tombs of the Eighteenth Dynasty, whereas the pictures of country life, its pleasures and occupations, hunting, fishing, and fowling, the visit to the farm, and those portraying handicrafts in which the dependents of great men worked for them, all things to which rural simplicity or patriarchal organization are the key-note, are usually taken from the older tombs of Benee Hasan and Memphis. It is also to be noticed that funeral subjects appear under the Eighteenth Dynasty, and are an important part of the pictures of the tombs, in contrast to the reticence of earlier times.

The Eighteenth Dynasty near its close witnessed a striking religious revolution the true history of which we can only guess. In Middle Egypt, at Tell el-

* The Emperor of Hindustan, Jehânger, speaks in his *Memoirs* of the contemporary Sultan of Turkey as the Cæsar of Room, a title not less curious than Her Majesty's title "Cæsar of India."

'Amárineh, the traveller is surprised by the ruins of a city overthrown in the age of the Pharaohs and never afterwards rebuilt. The other ancient cities of Egypt are marked by mounds, the growth of ages, the *débris* of Pharaonic, Ptolemaic, Roman, and sometimes Arab times, lying in strata one beneath the other. The temple, owing to the strength of its materials, is the chief and often the only ruin. If traces of archaic houses remain, they are to be sought for deep in the mounds. But at Tell el-'Amárineh the site is not marked by mounds, the ruins lie flat on the surface, and the temple has been levelled to the earth. What remains is the ground-plan of the temple, the palace, and the houses, of the whole city in fact as it was left at its overthrow. Had it not been for the religious feeling which has spared the sepulchral grottoes in the mountain behind, we should be wholly ignorant of the story of the strange events which caused the foundation and speedy destruction of a new capital, the city Khu-aten.

The British Museum contains two commemorative scarabæi of Amenoph III., great-grandson of Thothmes III. One records the king's marriage to a foreigner, Queen Tai, and the extent of his dominions, the other his exploits in lion-hunting. His great temple at Thebes has vanished, but the two colossi which represent the king, the Vocal Memnon and its fellow, still bear witness to the splendor of the last great reign of the Eighteenth Dynasty. Amenoph IV., the offspring of the foreign marriage, succeeded his father. It may be due to his mother's race that he is the strangest figure on the Egyptian monuments. At his time, be it remembered, Egyptian art was most flexible, and we cannot suspect it of caricaturing a king, least of all one who was exceptionally absolute. He is portrayed of a strange type, at once corpulent and meagre, and his wife, his daughters, and his court officers have the same characteristics. Nothing but foreign blood can reasonably account for this, though of course allowance for flattery would explain the assimilation of the courtiers to the royal type. If we could trace this type in the various and very characteristic pictures of foreigners as such which the monuments afford, the history of this curious episode would

probably be at once explained. But it is not so, and we must rather look for the wished-for evidence outside the horizon of Egyptian conquest.

The clue may perhaps be afforded by the religion of Amenoph IV., which was either an attempt to return to a real or imaginary primitive form of Egyptian sun-worship, or, what is far more probable, a foreign system. It scarcely seems possible that this worship could have been purely Egyptian, for it involved a marked departure from the rites and language of the Egyptian religion. The names of the Theban gods and the very characters that were their symbols were abandoned and obliterated, so that a new sign had to be found for the word "mother," written in Egyptian with the symbol of Mu-t, the mother-goddess. Nothing was retained but the name of the sun, and this usually in the form of Aten, "the disk," to avoid relation to the sun-god Ra. Amenoph changed his name, as compounded of that of Amen, to Khu-n-aten, "Splendor of the disk." The great temple at Khu-aten contained no image of a divinity; the sun alone was worshipped there, and only represented in the form of the disk of the luminary with rays, one or more of which terminate in a human hand giving the symbol of life to the worshipper or clasping him. The temple was decked with flowers, and flowers with fruits and incense were among the chief offerings. Choirs of priestesses, who sang hymns to the sun to the sound of harps, formed a special characteristic of the worship. In this there is a striking likeness to the Vedic religion, and the peculiar type of the innovating king is not unlike the Indo-Scythic. Was his mother an Indian princess?

The attempt of Khu-n-aten to make sun-worship the only religion of Egypt ended with his reign, or soon after. The subsequent kings, his relations by marriage, evidently adopted a policy of conciliation. The episode ended with the restoration of the national religion, and the destruction of the monuments of the sun-worshippers, shortly after which the Eighteenth Dynasty closed, and the royal power passed to the new family of the Ramessides. This great house, of which Ramses I. was the founder, and which counted Ramses II. and III. among

its sovereigns, seems to have been of Lower Egyptian race, and not impossible of partly Shemite descent, perhaps even counting some of the Shepherd kings among its ancestors. Any one who will compare the splendid heads of Ramses II. in the British Museum, especially that which is a cast of the Memphite colossus, with the heads of monarchs of the Thothmes and Amenoph line, will not fail to admit a strong tinge of Shemite national characteristics. The internal and external policy of the Ramessides points in the same direction. As the first king of the Eighteenth Dynasty was supported by an Ethiopian marriage, the sovereigns of the Nineteenth took a new attitude, and formed treaties with their Asiatic neighbors by which their whole foreign relations were changed. This may, however, have been a policy dictated by the appearance on their northern shore of new and terrible enemies, the restless islanders and coast-men of the Mediterranean.

The new line was forced to reconquer the Asiatic dependencies. After the short reign of the founder Ramses I., this enterprise occupied his active son Setee I., and the earlier years of his grandson Ramses II. Much had been accomplished, yet a fresh rising needed all the energy of the young king to overcome it. His father's empire did not reach the vast limits attained by Thothmes, but it gained in solidity on this account, and still more from the wise policy of placing garrisons in the strongholds of Palestine and Phoenicia. Thus, when the Syrian war broke out, Ramses had a surer basis of operations than Thothmes. In the interval the condition of Hither Asia had changed. No longer the Ruten, but the Kheta, 'or Hittites of the Orontes Valley, were the dominant power nearest to Egypt. It was by them that a great confederacy was formed, against which the most celebrated campaigns of Ramses were directed. Kedesh, "the holy city," on the Orontes, was their capital, and under its walls the decisive action was fought.

In the battle of Kedesh, the historian of the king of the Kheta was slain. The success of the King of Egypt was sung by a native poet, Pentaur, whose Ramesseis has come down to our time, engraven on the wall of the temple of El-Karnak,

and also written in a papyrus. There is much in this poem that has the air of a primitive Iliad. It is the record of the personal prowess of Ramses at a critical moment of the great campaign. If tribes of Asia Minor were in the Khetan confederacy, or if the maritime Greeks at this very time fell under Egyptian influence, the coincidence is curious. To this we must return hereafter.

The decisive battle did not end the war. It was not for many years that peace was established, and then not by the submission of the Kheta, but by the conclusion of a definite treaty of alliance, offensive and defensive, with extradition clauses very humanely framed between Ramses and the Hittite prince, who are spoken of as of co-ordinate rank, a relation for which the records of the Eighteenth Dynasty have as yet shown no precedent.

Another great military success marked the career of Ramses. While his father yet reigned but he was co-regent, the maritime tribes of the Mediterranean, allied with the Libyans, made the first recorded of the series of attacks which tended more than any other external cause to bring about the fall of the Empire. The enemies entered on the west of the Delta. Ramses defeated them and drove back the tide of invasion, which did not again take this direction until the reign of his son, seventy years or more later. The conqueror placed the prisoners in the royal body-guard (Maspero, *Hist. Anc.* 217). This policy was a disastrous consequence of the exhaustion of the fighting material of Egypt, for it founded a force of mercenaries, closely attached to the crown, who weakened the state from within, no less than the conflicts with their compatriots weakened it from without.

Ramses reigned sixty-seven years; the first third of this time was occupied by wars, the rest by vast architectural enterprises which covered Egypt and Lower Nubia with his records. Of the monuments still remaining the finest are the sepulchral temple at Thebes, commonly called the Memnonium, and the rock-temple of Aboo-Simbel, in Nubia. These are worthy in their beauty of the power of Egypt at that time; others show a negligence that marks the imperial desire for quantity rather than qual-

ity, in contrast to the comparatively few monuments of Thothmes III., which have a refined beauty often combined with small dimensions. Again the king is, more markedly than was Thothmes, the central figure of the state. Like the vast colossus representing him, which encumbered the first court of his sepulchral temple, his dignity is out of all proportion to that of his subjects. Even a more special cultus of the living sovereign appears to begin in his reign and at once to gain its highest development. Naturally, there are fewer private monuments, and the tombs of great officers are less in number and of lower interest than before. Meanwhile the official class had multiplied in the colleges attached to the temples, and a new literary activity strongly influenced by Shemite associations showed itself. The papyri of this age take the place of the earlier memoirs. Besides copies of the standard works of religion, they comprise poems both religious and historical, statistical records, fiction, and the whole circle of a scribe's official work, letters, memoranda, records of legal procedure, and so forth.

Under the conditions of the reign of Ramses II., the genial life of Egypt seems to have departed. The air is heavy with the sound of the labor of slaves in the condition of the Hebrew thraldom. The Egyptian workmen are pillaged by bandits and non-suited by corrupt judges. The lower priests have become robbers of tombs. No wonder that the idea of the future state became dominant. The Egyptians no longer had that joy in life which expressed itself in the pictures of their tombs as late as the time of the Eighteenth Dynasty. Like men wearied in body and soul, their thought was more of the future than of the present life. There are too few private tombs of this period to give the data for a safe induction, but we may draw this inference from the royal tombs. They are excavated in the sides of two secluded valleys in the western mountain behind Thebes. Of the two which belong to the Eighteenth Dynasty one is religious in its subjects the other still contains the records of the king's sports. Those of the Ramessides are known in a continuous series. The subjects of the walls of their long galleries and their

chambers are, with a trifling exception, wholly religious, and relate to the progress of the disembodied soul through the regions of the nether world. They tell the mystical story of the punishments, the trials, and the rewards of the Egyptian inferno, purgatorio, and paradise. If they lack the beauty of the great Italian poet, they equal his grim realism in the pictures which portray the passage of the justified soul through trial to happiness, and show us how the sinner passed into misery. Here the idea of the other world fills the whole horizon.

The extreme length of the reign of Ramses was, as in other histories, the cause of subsequent weakness and disaster. His successor was an aged son, Menptah, who had to meet the difficulties which were easily overcome by the youth of his energetic father. The Libyans and their maritime allies broke the long tranquillity of Egypt by a formidable invasion and temporary conquest of the north-west. The power of the monarchy was thus shaken, and the old king was not the leader to restore it. His obscure reign was followed by others even obscurer, and the Nineteenth Dynasty ended in complete anarchy, which reached its height when a Syrian chief, in what manner we know not, gained the rule of the whole country.

It is to the reign of Menptah that Egyptian tradition assigned the Exodus, and modern research has come to a general agreement that this is its true place in Egyptian history. It is this question which we have next to notice, with that larger one of which it is a part, the bearing of the Egyptian records on the history of the Hebrews from Joseph to Moses. With the rise of the Twentieth Dynasty we obtain a wider view of the relations of the Egyptians with the maritime nations of the Mediterranean, the earlier incidents of which have been merely touched on. The whole question is most valuable as illustrating the Homeric poems, and the earliest pre-Hellenic and proto-Hellenic antiquities, discovered in the Troad, at Mycenæ, and in Cyprus. It may fitly follow the problem of Israel in Egypt.

As soon as hieroglyphic texts had been read, the public eagerly asked the inter-

preters, "What do the monuments tell us of Joseph and Moses, of the settlement in Egypt, the sojourn, and the Exodus?" For the answer the Egyptologists long fruitlessly questioned the monuments. In their eager search they found materials of which they raised a series of ill-constructed theories, fated to fall as soon as they were completed. Thirty years ago, Dr. Lepsius made the first step in the direction of sound criticism. His valuable results were scarcely added to until quite recently, when M. Chabas, and still more, Dr. Brugsch, carried the inquiry much farther. It may be fairly said that we now hold the wished-for evidence, and that each year is sure to add to its value. For it must be understood that the materials are as yet scarcely as available as they might be even to Egyptologists. Some are only known to us through translations, and the original documents are needed before criticism shall decide on their bearing. The inquiry itself has shifted its ground in the inquirer's hands, and only a very careful comparison of their statements can give the general worth of the results. Yet these results, put at their lowest, are what was truly wanted. We have, indeed, no record of Joseph's administration, or of the oppression and the Exodus. What we have is an accurate general knowledge of the geography of the part of Egypt where the Israelites were settled, and much information as to the political and social state of the country at the time of their stay. It is true that we cannot point with certainty to the Egyptian name of each Pharaoh mentioned in the Hebrew record, though, indeed, we can probably do this in the cases of the two most important of them, but we hold an independent set of documents, most of them of the period as to which we are inquiring, which we can use, not as detailed illustrations, but as an almost continuous commentary. Thus we can read the Bible history by the clear light afforded by monuments contemporary with the events, with occasional aid from later Egyptian sources.

The first result is a general agreement as to the date of the Exodus. This is mainly due to Dr. Lepsius, the earliest of our inquirers. If his theory is correct, we have no longer to make our

choice between the extremes of B.C. 1648 (Hales) and B.C. 1314 (Rabbinical chronology), the date of B.C. 1491 (Ussher) in the margin of the English Bible occupying nearly the middle point in more than three hundred years of uncertainty. Lepsius's theory would, in the form in which it is now generally accepted, place that event towards the close of the fourteenth century.* The essential argument is very simple.

We read in *Exodus* that the Israelites, during the oppression, built for Pharaoh a town called Rameses, which, or another of the same name, is afterwards mentioned as the starting-point of the Exodus. A Rameses was therefore near the north-eastern boundary of Egypt. The name Rameses is the same as that of several kings of Egypt, the first of whom was, as already stated, the head of the Nineteenth Dynasty. This king consequently was the earliest to whom the building of a city Rameses could be assigned. His, however, was an extremely short reign, and it is most unlikely that any city was named after him. Dr. Brugsch has shown that his grandson Rameses II. rebuilt Tanis, the Zoan of the Bible, and called it Pa-Ram-ses, the city of Ramses, or else founded the new city close to the older one. Tanis suits the geographical conditions, and, if another city be intended by the Biblical Rameses, the builder would be the same, as any subsequent Ramses is far too late. Ramses II. would thus correspond to the great oppressor, and the Exodus would have taken place shortly after his reign, the long duration of which (sixty-seven years) leaves a few years of the eighty assigned in the Bible to carry us on through the oppression for the next reign, until the Exodus. Manetho, the Egyptian historian, speaking, if Josephus is to be trusted, on the authority of tradition, states that this event occurred in the reign of Menptah,

* The stress laid by Lepsius on the Rabbinical date of the Exodus, B.C. 1314, is, we would venture to think, injudicious. It is founded, like Ussher's, on the interval of four hundred and eighty years before the building of Solomon's Temple, and it therefore ought to fall more than a century and a-half before B.C. 1314. Its lateness is due to the accidental errors of the reckoning after the building of the Temple. Egyptologists generally would, no doubt, prefer a less exact statement.

the successor of Ramses. The date of Menptah was probably during the fourteenth century B.C., and may be reasonably placed near its close. Thus the date of the Exodus would be a little before B.C. 1300.

So late a date of the Exodus is startling to most English scholars. It may therefore be mentioned that it receives collateral support from the most reasonable view of the evidence of the Hebrew genealogies for the period between the Exodus and the kings, although this evidence can scarcely be used in the construction of a theory. If these genealogies are of successive generations, the Exodus would fall about B.C. 1300. It would be replied that Hebrew genealogies frequently omit a generation, or even several generations, but the pedigree of David, remarkable for the few generations it contains, is supported by evidence of completeness which seems to forbid the idea that any single link has been dropped.

The date of Joseph may be next taken. It presents a greater difficulty than that of the Exodus. At the outset a concession must be made to the Egyptologists. The later Hebrew chronology, if the view given above is correct, is consistent with the theory that the genealogies of that time are unbroken, but the majority of scholars are in favor of reckoning the earlier period, that now under consideration, by what they hold to be the genuine numbers of the Biblical text. The development of the family which settled in Egypt into the nation which went out of it implies a long period of time, and the Hebrew text states the interval to have been four hundred and thirty years. If we base our reckoning upon this number, and place the Exodus in the reign of Menptah, the government of Joseph would fall before the Eighteenth Dynasty, in the later part of the Shepherd dominion, somewhat before B.C. 1700. Here we find on the monuments no definite point of contact, and the theory must be tested by general historical probability.

Joseph would thus have been governor of Egypt under a Pharaoh who, though a foreigner himself and thus able to appreciate foreign merit, was one of those who had adopted Egyptian titles and usages. The subsequent oppression

would thus have been a near or remote consequence of the expulsion of the Shepherds. It is precisely in the later Shepherd period that Dr. Brugsch finds an Egyptian record of a famine of many years' duration. No other such famine is recorded in later Egyptian annals until that of the Fátimé Khaleeféh El-Mustansir billáh, remarkable as having lasted seven years (A.D. 1064-1071) like that of Joseph. Great famines in Egypt are extremely rare, because they require a succession of very low inundations. Such failures of the river seldom happen singly, and a sequence of seven is most extraordinary.

Any one who reads the history of the time of Joseph side by side with that of the Exodus must be struck by the different conditions of Egypt which they portray. The transition is from almost patriarchal simplicity to a highly organized condition of society.

Unfortunately the monuments of the Shepherd kings are too scanty for us to be able to draw from them a picture of the manners of their subjects. We know, however, that in the later period of their rule, the time to which the government of Joseph is now assigned, the kings had adopted Egyptian manners, and we cannot suppose that in civilization they had advanced beyond the conquered race, in this the masters of the conquerors. We do know the condition of the Egyptians about this time. Then, and later, up to the earlier reigns of the Eighteenth Dynasty, they were not more cultivated, if as cultivated, as under the Twelfth Dynasty. All the conditions of life were those of the old monarchy as distinguished from the Empire, so simple that it would require a critical eye to discern the germs of the elaborate social organization of the Imperial time.

The geographical indications in the Biblical history of Joseph are scanty; but they are consistent with his proposed place in Egyptian history: those of a later period fill in their outline. It seems evident that the capital of the Pharaoh to whom he was minister was in Lower Egypt. When Joseph places his kinsfolk in Goshen, it is that his father may be near him. Throughout the comings and goings of his brethren he appears to be near the eastern border. Zoan, or the stronghold Avaris, in the

same part of Egypt, was the capital of the later Shepherds, and the position of either would suit the circumstances of the narrative.

The name of Goshen has been recognized by Dr. Brugsch in the Egyptian texts as Kesem (Gesem), the Phaccusa of the Greek writers. He places the land of Goshen near this town, and therefore not far south of Tanis (Rameses), which would perfectly agree with the conditions implied in the narrative of the Exodus, in which a Rameses is the starting-point of the settlers in Goshen.

The story of Joseph is illustrated step by step from the Egyptian texts. The *Tale of the Two Brothers*, the earliest known of Egyptian fictions, was no sooner read than it was seen to relate in its turning-point an incident identical with the trial of Joseph. Pharaoh's dream of the kine describes the years of plenty and famine under the usual type of the inundation, as Dr. Birch has shown. The installation of Joseph has its parallel in the case of an Egyptian governor of the age of the Eighteenth Dynasty who received exactly the same office, "lord of all Egypt" (Gen. xlv. 9), in the Egyptian record a "lord of the whole land," the word lord being *adon* in both cases (Brugsch, *History*, i. 269, 270). The term in Hebrew means "ruler;" in Egyptian its sense is more special, and the whole title of Joseph may best be rendered "regent" (Brugsch, *l. c.*). Two circumstances of the narrative brings us very near Egyptian official usages. "By the life of Pharaoh" is used as a strong asseveration by Joseph (Gen. xlvi. 15, 16); and when he has sworn to his father after the Hebrew manner that he will not bury him in Egypt, then "Israel bowed himself upon the head of his staff" (xlvii. 29-31). Both the expression "by the life of Pharaoh," and the custom of bowing upon the staff of an officer, are traced by M. Chabas in his interesting essays on Egyptian judicial proceedings, where he cites the following passage describing the taking an oath by a witness in a trial at Thebes: "He made a life of the royal lord, striking his nose and his ears, and placing himself on the head of the staff" (*Mélanges Egyptologiques*, iii. I. 80), the ordinary oath when the witness bowed himself on the magistrate's staff of office.

He well remarks that this explains the passage in Genesis quoted above as a recognition by Jacob of his son's authority (*ibid.* 91, 92). This illustration shows that the Septuagint is right in reading staff, *πίφαρον*, in agreement with Heb. xi. 21, where the Masoretes read bed, *בְּנֵשׁ*; and a question of controversy disappears.

The narrative of the oppression and the Exodus, more detailed in reference to Egypt than that of Joseph's period, is fuller in points of contact.

Unfortunately we do not know the duration of the oppression of the Israelites, nor the condition of Lower Egypt during the Eighteenth Dynasty, which, according to the hypothesis here adopted, corresponds to a great part of the Hebrew sojourn. It is, however, clear from the Bible that the oppression did not begin till after the period of Joseph's contemporaries, and had lasted eighty years before the Exodus. It seems almost certain that this was the actual beginning of the oppression, for it is very improbable that two separate Pharaohs are intended by the "new king which knew not Joseph" and the builder of Rameses, or, in other words, Ramses II., and the time from the accession of Ramses II. to the end of Menptah's reign can have little exceeded the eighty years of Scripture between the birth of Moses and the Exodus.

The Egyptian monuments are almost silent as to Lower Egypt from the time of Aahmes, conqueror of the Shepherds, to that of Ramses II. Whether the kings of the Eighteenth Dynasty oppressed or tolerated the Semitic population we do not know. Under the Nineteenth Dynasty, not impossibly of partly Shepherd race, Tanis is refounded, and the whole of the east of Lower Egypt is adorned with temples and specially strengthened with forts. Semitic ideas come into fashion. The new literary activity may well be due to contact with Semites. This might seem strange of a time of persecution, but we must reflect that it implies a long previous contact of two nationalities, and that precisely what we observe in the Semitic character of the Egyptian of the Nineteenth Dynasty is conversely true of the Hebrew of the same age which is colored

by Egyptian, though far less markedly. The contact had its effect on both sides.

If the adjustment of Hebrew and Egyptian history for the oppression, as stated above, be accepted, Ramses II. was probably the first, and certainly the great oppressor. His character suits this theory ; he was an undisputed autocrat who raised the regal power into a religious abstraction, and covered Egypt and Lower Nubia with vast structures that could only have been produced by slave-labor on the largest scale. The Egyptians had been exhausted by the needs of the army, of which the ranks had already been recruited from captives. Strong as was the government, it lived in danger of internal discontent, military revolt, and the invasion of a more active race. The King of Egypt might, with some show of policy, endeavor to limit the growth of a young and vigorous foreign stock without civil organization or military training, and at the same time make use of it for his public works. The Egyptians as a nation seem to have had little share in the persecution. They were too Shemite, and the Shemites too Egyptian, for any national sympathy with the oppressor. He, however, being by his instincts of rule apart from his people, would be in no way influenced by their better feelings. As the character of the oppressor suits Ramses II., so does that of the Pharaoh of the Exodus suit Menptah. Regent in the latter years of Ramses, he came to the throne an old man. His reign, marked by a dangerous invasion from the west, was unfortunate. He inherited his father's ideas of prerogative, but not his force of will or personal courage. Once if not twice he shrank from leading his armies to battle in times of the utmost danger. This implies the mixture of tyranny and vacillation that marks the Pharaoh of the Exodus.

No positive mention on any Egyptian monument of the slavery of the Hebrews has yet been found. We know that the great works of the Eighteenth and Nineteenth Dynasties, and especially of the latter, were in part at least executed by foreign slaves. It has been argued that one race so employed, the 'Aperiu, correspond to the Hebrews. The identification is, however, philologically faulty, and Dr. Brugsch has rejected it on his-

torical grounds. Probably the Hebrews were designated by the Egyptians by terms also applied to other slave populations. The building of Pithom and Ramses during the oppression gives us a better clue. The great probability that Ramses is identical with Pa-Ramses, Tanis, has already been shown, and M. Chabas suggests Pa-tum, the abode (city) of (the god) Tum as equivalent to Pithom, pointing out a place of that name in eastern Lower Egypt (*Mél. Eg.* 2 sér. 155). Dr. Brugsch identifies the Biblical Pithom with the capital of the Sethroite nome where Tum was worshipped (*Hist. i.* 202 seqq.).

It is chiefly in proper names that we recognize the Egyptian influence on the Hebrews. That of Moses has been admitted to be Egyptian, and recognized in the name Mes, Messu, Messui, not unusual under the Empire, which means "born, brought forth, child." Dr. Brugsch has lately proposed Mesha, or, as he reads it, Mosha, which is of common occurrence, and is found in the name of a place in Egypt, "the island" or "coast of Mesha" (*Dict. Geog.* 308). There is no Hebrew derivation for Aaron or Miriam. Aaron has an Egyptian sound ; Miriam may be Mereet("beloved," with a Hebrew termination. Phinehas (Pi-nehas) is not "mouth of brass," which is doubtful etymologically and not sense, but Pi-nehas "the Negro," an Egyptian name no doubt applied to dark men. Harnepher, whose name occurs in apparently the sixth generation from Asher (*1 Chron. vii. 36*) is evidently Har-nefer, "Horus the good," which is to be preferred to Gesenius's startling conjecture that it may be Ne-harnepher from a Hebrew root "to snore," and a Syriac "to pant."

In the history of the oppression and Exodus there are many details which show a knowledge of Egypt, particularly in the time of the Empire. Some of these have been long known, others have but lately come to light. It has been long pointed out that the employment at this period of foreigners in brickmaking under taskmasters is represented on a mural painting : the record of forced labor in making bricks, of which a daily tale was required, is a later discovery (Chabas, *Mél. Eg.* 2 sér. 123, 124).

The geography of the route of the Exodus has been treated by Dr. Brugsch in a most interesting paper, which was read before the Oriental Congress of London in 1874. His theory waits full critical discussion, for the sufficient reason that the Egyptian documents on which it rests are not all before the public. Its main features may, however, be here indicated. Rameses being identified with Tanis, the route of the Hebrews is compared with that of an Egyptian scribe in pursuit of two fugitive servants, as recorded in Papyrus Anastasi, v. 19, 20. The stations of the Egyptians are Pa-Ramses, Thuko, and Khetam, where the pursuer learns that the fugitives had passed northward of Migdol. The stations of the Israelites are Rameses, Succoth, Etham, and near Migdol. The stations noted in the narrative of the scribe are each a day's journey apart, except that he is two days between Thuko and Khetam, probably on account of a delay for inquiry. The Israelite stations mark each a day's journey. After leaving Khetam the fugitive servants turned northwards; after leaving Etham the Israelites also turned.

These resemblances are most remarkable. It is, however, unfortunate that the second and third stations do not better agree. The name of the second is written by Dr. Brugsch Suko or Sukot except in the list of Nomes in which he writes it accurately Thukot (ii. 318). He has not proved it can be read with initial "S." Unfortunately for the identification, Succoth, "tents," is good Hebrew, and a likely name for a settlement in this country, always frequented by tent-dwelling tribes. Khetam, admitting the vowels to be correctly added, is not really like Etham, and, being a word traceable in Hebrew as well as in Egyptian, would scarcely have lost its initial radical in transcription.

If, however, the route is thus identified, there can be little doubt that Dr. Brugsch has made out a strong case for the passage by the Israelites not of the Red Sea, but of Lake Serbonis—

"that Serbonian bog
Betwixt Damietta and Mount Casius old
Where armies whole have sunk."

This marsh, be it remembered, was anciently subject to overflows from the Mediterranean (Strabo, i.), which, add-

ed to its treacherous quicksands, made it most difficult to pass. The term used in the Hebrew text, "Sea of Reeds," is specially applicable to Lake Serbonis, and there does not seem to be any sufficient reason for rendering it "Red Sea." The only other tenable theory, now that the main outlines of the geography of this part of Lower Egypt are certain, is that the Israelites crossed the Red Sea near its ancient head, now represented in part by the small lakes and marshes on the line of the Suez Canal.

The close relation now established between the Egyptians and the Hebrew settlers brings us face to face with a question of far higher interest than that last noticed. We must now ask whether the monuments of Egypt throw any light on the possible connection of the Egyptian religion and morals with the religion and morals of the Hebrews.

The Hebrew Law and the Egyptian religion have nothing in common but that which is the basis of the Law, and is merely traceable in the theology of Egypt, the doctrine of the unity of God. In the Law this idea excludes all idolatry, and even forbids the idea of inferior divine intelligences; in the Egyptian belief it is almost lost in the crowd of the Pantheon, and when discernible in the more profound part of the sacred writings it merely appears as the source of polytheism, springing not so much from monotheism as from the idea of a First Cause. To an ordinary Egyptian, monotheism must have been the very opposite of the national creed; and if he recognized a trace of it in the religious writings, he could not have detached it from the polytheistic associations which there surround it.

The moral philosophy of the Egyptians, if we may judge from its scanty remains, has a far different relation to the Hebrew teaching. In Egypt, as in Greece from the fifth century before the Christian Era, there were serious thinkers who held the great truths of religion, and rejected the phraseology in which the priests concealed them. No other conclusion can be drawn from such a book as the *Proverbs of Ptah-hotep*, where the idea of one God runs through its moral teaching, as the key to man's responsibility for his actions. The un-

named First Cause of the Ritual is not mentioned in this text ; the Supreme Being is spoken of as God. The sacerdotal term used by those who composed the Ritual is discarded as implying polytheism, and another used which is in itself a protest against polytheism. Moses, "educated in all the wisdom of the Egyptians," could not have failed to have known this teaching. The documents on both sides do not, however, warrant the supposition that Hebrew monotheism had its origin in this esoteric Egyptian conception (Cf. Maspero, *Hist. Anc.* 289). A doctrine which is clear in idea and precise in expression does not spring from a vague abstraction. The shadowy truth that remained after Egyptian untruth had been eliminated could not have been the source of the vigorous belief that filled the whole horizon of Hebrew thought. Yet as in the patriarchal belief, so in the Egyptian philosophy, the unity of God was known, and thus there seems to have been a certain fitness in the education as well as in the parentage of Moses the lawgiver.

The contrast between the two religions is in nothing more remarkable than in the doctrine of the future state. Upon that doctrine, which does not appear in the Mosaic law, rests the whole Egyptian teaching as to man's moral and religious duties. With its failure as the motive of life arose in its stead the performance of magical rites and routine acts of worship under the power of an ever-growing priesthood who held the terrors of purgatory over the heads of the laity. The practical value of the doctrine thus vanished utterly.

In the Hebrew system the rewards and punishments are of this life, and the future state, the greatest subject of thought in Egypt, is not once alluded to. Yet as the whole Hebrew settlement must have been aware of a great truth, which be it remembered is ignored in the Mosaic Law, not denied, it may be supposed to have remained in the background, ultimately fading from the consciousness of the people, to reappear when the prophets gradually taught it to them. Had this doctrine been taught by Moses to the Hebrews dogmatically, they would probably have returned to the worship of Osiris.

With such startling differences in the main structures of the two religions, certain points of agreement in detail, some pre-Mosaic, some common to the Egyptians and other nations, must not be allowed too great a significance. We are accustomed to attach too much importance to the mention of symbolic representations in the Mosaic narrative. Provided they were not for purposes of worship, they could not have come under the prohibition usually thought to extend to them. The material adjuncts of worship may well have been similar in both religions. Sacrifices could not have been performed without knives. A tabernacle and a temple were necessary, and if so, perhaps an ark as a central object, which, as unconnected with any image, would be a perpetual protest against the ideas which were associated with the Egyptian arks.

The date of the Hebrew documents in general has been here assumed to be that assigned to them by the older scholars. This position is justified by the Egyptian evidence. German and Dutch critics have labored with extraordinary acuteness and skill upon the Mosaic documents alone, with such illustrations as they could obtain from collateral records, using, be it remembered, such records as all the older, and too many of the later, classical scholars out of Germany and France have used coins and inscriptions, not as independent sources, but as mere illustrations. The work has been that of great literary critics, not of archæologists. The result has been to reduce the date of the documents, except a few fragments, by many centuries.

The Egyptian documents emphatically call for a reconsideration of the whole question of the date of the Pentateuch. It is now certain that the narrative of the history of Joseph and the sojourn and Exodus of the Israelites, that is to say, the portion from Genesis xxxix. to Exodus xv., so far as it relates to Egypt, is substantially not much later than B.C. 1300, in other words was written while the memory of the events was fresh. The minute accuracy of the text is inconsistent with any later date. It is not merely that it shows knowledge of Egypt, but knowledge of Egypt under the Ramessides and yet earlier. The

condition of the country, the chief cities of the frontier, the composition of the army, are true of the age of the Rames-sides, and not true of the age of the Pharaohs contemporary with Solomon and his successors. If the Hebrew documents are of the close of the period of the kings of Judah, how is it that they are true of the earlier condition, not of that which was contemporary with those kings? Why is the Egypt of the Law markedly different from the Egypt of the Prophets, each condition being described consistently with its Egyptian records, themselves contemporary with the events? Why is Egypt described in the Law as one kingdom, and no hint given of the break-up of the Empire into the small principalities mentioned by Isaiah (xix. 2)? Why do the proper names belong to the Ramesside and earlier age, without a single instance of those Semitic names which came into fashion with the Bubastite line in Solomon's time? Why do Zoan-Rameses and Zoar* take the places of Migdol and Tahpanhes? Why are the foreign mercenaries, such as the Lubim, spoken of in the constitution of Egyptian armies in the time of the kingdom of Judah, wholly unmentioned? The relations of Egypt with foreign countries are not less characteristic. The kingdom of Ethiopia, which overshadowed Egypt from before Hezekiah's time and throughout his reign, is unmentioned in the earlier documents. The earlier Assyrian Empire which rose for a time on the fall of the Egyptian nowhere appears.

These agreements have not failed to strike foreign Egyptologists, who have no theological bias. These independent scholars, without actually formulating any view of the date of the greater part of the Pentateuch, appear uniformly to treat its text as an authority to be cited side by side with the Egyptian monuments. So Lepsius in his researches on the date of the Exodus, and Brugsch in his discussion of the route, Chabas in his paper on Rameses and

Pithom. Of course it would be unfair to implicate any one of these scholars in the inferences expressed above, but at the same time it is impossible that they can, for instance, hold Kuenen's theories of the date of the Pentateuch so far as the part relating to Egypt is concerned. They have taken the two sets of documents, Hebrew and Egyptian, side by side, and in the working of elaborate problems found everything consistent with accuracy on both sides; and of course accuracy would not be maintained in a tradition handed down through several centuries.

If the large portion of the Pentateuch relating to the Egyptian period of Hebrew history, including as it does Elohistic as well as Jehovistic sections, is of the remote antiquity here claimed for it, no one can doubt that the first four books of Moses are substantially of the same age. The date of Deuteronomy is a separate question.* Leaving this problem aside, the early age of the first four books does unquestionably involve great difficulties, but not nearly so great as the hypothesis of late date when they are confronted with the Egyptian records.

Those who refuse to accept the results of the most advanced school of Hebrew critics on the ground that they are inconsistent with the evidence of the Egyptian documents, must beware of throwing themselves into the arms of the other extreme party, who deny the value of criticism, and refuse to accept the evidence of partial compilation and redaction patent in the Biblical texts. It would be a fatal loss to science were the fruits of German and Dutch criticism neglected for a year, criticism which, though sometimes rash and arrogant, is in general acute, learned, honest, and not without a reverence the apolo-

* The discovery of a great frontier fort, Zar, perhaps, as Brugsch thinks, identical with Tanis, explains the passage in Gen. xiii. 10, which otherwise involves a long parenthesis, "the plain of Jordan" being there described "as the garden of the Lord, like the land of Egypt, as thou comest unto Zoar."

* The lamented Deutsch, remarkable among Hebraists for his acute literary perception, remarked to the writer that he could not explain the origin of Deuteronomy on any other hypothesis than its original Mosaic authorship, redaction being enough to account for its peculiarities. This opinion may not have been maintained, and therefore it is merely stated as a remarkable hint thrown out in conversation. Many scholars would not believe that Deutsch could have held the view for a moment: this is why the recollection deserves to be put on record.

gists, those Uzzas who are always putting their clumsy hands to the Ark, cannot imagine. Of this criticism it may be said that its excellences in analysis are marred by its defects in constructive skill. Its facts are admirably chosen, but its theories are hastily put together, their very multitude being sufficient to arouse the keenest mistrust. For if a school has produced from the same evidence many distinct hypotheses of the date of a set of documents, all but one theory must be false, and therefore the great majority are in error, and if we trust ourselves to a guide he is in a minority of one.

The wise course is to devote all our labor to the collection of facts, the accumulation of which, on the true principle of all scientific discovery, will ultimately form correct theories. The learned world is more grateful for one solid volume of new facts than for a library of airy fancies. All such work honestly done is in truth work of which the results will last for ever.

NOTE ON DR. BRUGSCH'S "HISTORY OF EGYPT UNDER THE PHARAOHS."

In Dr. Brugsch's *History of Egypt** an authority of the first rank has stated his views of the latest results of Egyptology in a style so attractive as to ensure a large body of readers among the class unacquainted with the subject. As he has avoided the usual cautions with which most scholars, and especially his countrymen, are accustomed to guard themselves in stating hypotheses, his readers will accept as final much that he says on matters which are still controversial. As the writer of these papers is not convinced on some very important questions of this nature, and believes that his scruples are shared by several authorities of great weight, he would venture to state his reasons very briefly in the present place.

There are three leading questions noticed in this work—the route of the Exodus, the relation of the Egyptians to the maritime nations of the Mediterranean, and the alleged conquest of Egypt by the Assyrians about the time of Solomon.

The theory of the route of the Exodus has been noticed in the previous paper, and it has been shown that the identifications of the stations are by no means certain. It is not necessary here to do more than to repeat that Dr. Brugsch's remarkable argument is weakened by the positive manner in which the identifications are put, as is specially seen in the case of the Egyptian Thuko or Thukot, which, being identified with the Hebrew Succoth, appears throughout the argument with an initial S. The exact transcription should be maintained until the identity with Succoth is proved, otherwise logic is violated.

The identification of the maritime enemies of the Ramessides with certain primitive Pelasgic, and other pre-Hellenic or proto-Hellenic tribes, not necessarily established in the seats where Greek history shows them, but moving towards those seats, has been generally accepted as a firmly-established position won for science by the acute scholarship of M. de Rougé and fortified by the solid learning of M. Chabas. It has received additional strength by the adhesion of Dr. Birch, the most cautious of leading Egyptologists in the domain of historical conjecture (*Records of the Past*, iv. 37, seqq.). Dr. Brugsch rejects this view "as a dangerous error, which has been unfortunately introduced into our science" (i. 16). In lieu he proposes Caucaso-Colchians, chiefly because, according to his reading of a difficult term, most of the hostile tribes in question were circumcised, with which the well-known statement of Herodotus as to the Colchians agrees. Certain Colchian tribes are most ingeniously identified with the maritime enemies of Egypt, and where this fails they are recognized in tribes settled in Libya, the Libyans having been allied with the maritime nations in question. It may be fairly said that M. de Rougé's identifications are verbally as good as Dr. Brugsch's, and, what is more to the point, they have a historical consistency which his lack. Indeed, he seems somewhat to doubt his theory, for the Caucaso-Colchians are associated with Carian immigrants (ii. 124), and then become Colchian-Cretans (125), and lastly, we hear, as to a later time, of

* London: John Murray

"the migrations of the Carian-Colchian nations which, from Cilicia and the mountains of Armenia, partly by land through Asia Minor, and partly by water on the Mediterranean, made a formidable campaign against Egypt" (147). No exception could be taken to a change of nomenclature in the case to which the quotation refers, when new enemies are joined to the old ones, but it is difficult to see how such strange mixed populations can be imagined without the strongest possible evidence, and how such a land journey as that from Colchis to Egypt can be combined with a series of maritime attacks. Eliminate the Colchians, of whose migrations we have no hint elsewhere, and Dr. Brugsch's geographical view is in its large outlines not very different from M. de Rougé's. He concedes that these enemies of Egypt occupied the opposite coasts and islands of the Mediterranean. It is rather to this general view that the inquiry of the next paper will be directed, for it is an impregnable position, in no way shaken by disagreements as to details. It must, however, be remembered that the identifications of M. de Rougé are of names that reappear in history, whereas those of Dr. Brugsch have merely a geographical survival. It is almost inconceivable that a great maritime confederacy should have been wiped out and left no trace but in some obscure names on the Libyan coast.

The Assyrian conquest of Egypt is the most startling of Dr. Brugsch's theories. It was well known that Sheshonk I., the Shishak of the Bible, who founded a new Egyptian line, the Twenty-Second Dynasty, about B.C. 970 was of Shemite origin. He was contemporary with the latter part of Solomon's reign, and invaded Judah in that of Rehoboam. His Shemite origin is accounted for by Dr. Brugsch in the following manner. His grandfather, also called Sheshonk, married an Egyptian princess; their heir Nemurot (Nimrod) was buried by his parents at Abydos in Egypt. An inscription there discovered states the circumstance. In it, as now translated by Dr. Brugsch, we are astonished to read that both the earlier Sheshonk and his son Nimrod are called "great lord of Assyria," "great king of Assyria," "the great king of kings,"

and "great king of the Assyrians," and the like (ii. 199, seqq.). The text was partly made known by Dr. Brugsch in the *Zeitschrift für Aegyptische Sprache* (1871, 85, 86). Of this presently. From the translation now given is evolved the conquest of Egypt by the Assyrians a little before B.C. 970, and Dr. Brugsch accordingly discovers the names of certain kings of Assyria on the Egyptian monuments. But on referring to the history of Assyria at this period as given by M. Ménant in his *Annales des Rois d'Assyrie* (p. 53, seqq.), not one of those names can be recognized. It is just possible that a *fainéant* king or two may have ruled between the close of the old Assyrian Empire and the rise of the new Assyrian Kingdom about B.C. 1020. Yet neither the later kings of the Empire nor the earlier of the Kingdom which succeeded it could possibly have conquered Egypt. They were kings of limited power and narrow dominions. Equally does the strength of the Hebrew monarchy under David and Solomon forbid Dr. Brugsch's theory. It is, however, possible that the heirs of the earlier line may have fled to Egypt on their overthrow, and there maintained their pretensions.

What, however, is the evidence that the personages mentioned in the inscription referred to by Dr. Brugsch are Assyrians or kings? The word now rendered Assyria is "Mat," thus understood "with the assistance of the cuneiform inscriptions" (ii. 192, 192). But in Assyrian "mat" is merely country (Norris, *Assyrian Dictionary*, s. v. 888). Referring to Dr. Brugsch's original publication of the inscription, the theory loses its other support. Sheshonk, the grandfather of the Egyptian king of the same name, is there called *ser a en serau*, "the great prince of princes," and his son Nimrod *ser en matau*, "prince of the Mata (body-guard)," these being Dr. Brugsch's original translations. The idea that *ser* must be rendered "king" is quite new. The Egyptian symbol is a polyphone ideograph reading *ur* or *ser* (Brugsch, *Grammaire Hierog.* 116). *Ur* is the Egyptian, *ser* the Egypto-Semitic, for "chief," and the term is applied to any foreign ruler, the Egyptian terms for "king" being limited to those who ruled Egypt. When

unaccompanied by a phonetic equivalent the reading of the symbol is doubtful, but when it is applied to a foreigner from the Ramesside age downwards the more likely reading is *ser*. In a very interesting decree of Ptolemy I., while governing Egypt for Alexander Aegus, the king receives the Pharaonic titles, and Ptolemy is called *ser ð*, "great prince" of Egypt, and *ser*, "prince," and *kshatrapon*, "satrap," the word *ser* being rendered by Dr. Brugsch in this case "governor" (*Zeitschrift für Aeg. Sprache*, 1871, 1, seqq.). It must be added that he cannot now change the

reading of *ser* in this inscription, for Ptolemy was clearly governor under a king. Thus there is no necessary support for the new hypothesis in the titles applied to the Shemite princes of Egypt.

Any criticism of Dr. Brugsch would seem ungracious were not the reputations of other great scholars at stake, and were it not that his extensive learning and admirable power of putting a case are apt to create a confusion in the minds of ordinary readers between what is doubtful and what is proved.—*Contemporary Review*.

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A ROMANCE OF ROYALTY.

"If," as the Duchesse de Bourbon said to her unfortunate kinswoman, Marguerite d'Anjou, "a book were to be written on the calamities of illustrious ladies of royal birth, it would doubtless exceed in pathos and dramatic interest all the tragedies of the world." Amongst those most cruelly punished for this fatal distinction of royalty, the Lady Arabella Stuart holds a foremost place. Her story is one of the saddest told in the history of Stuart woes, for her only crime was her close proximity to the English throne, a position which two centuries ago perilled alike liberty and life. Great-granddaughter of Margaret Tudor, sister to Henry VIII., she stood in the same relationship to Queen Elizabeth as James I. Only child of Charles Lennox by his marriage with Elizabeth Cavendish, daughter of Bess of Hardwicke, she was thus niece to the ill-fated Mary Queen of Scots, a lineage which cast its shadow over the destiny of the poor babe from the very commencement. The precise year and place of her birth are fixed by a letter from her paternal grandmother, Margaret Douglas, to the captive queen, confirmed further by a curious collection of pedigrees entitled "*Genealogia Regum Anglia, 1582*," wherein is recorded: "*Arabella nata 1575 apud Chatsworth in Anglia*." Earl Lennox died in 1577, leaving behind him a young widow and Arabella, who in spite of their grand relations were plunged into a state of absolute poverty, so early in the story did might prove stronger than right. Queen Elizabeth

at once took possession of the English estates belonging to Arabella from Margaret Tudor, a line of conduct initiated by the Scotch King James, whose favorite D'Aubigny received the inheritance of Lennox, though his Majesty certainly offered to compromise matters by marrying the Princess to the new possessor; but as she was not yet three years old the recompense appeared only a farce, while the robbery remained a fact. The gentle Elizabeth Cavendish sank under this twofold grief, she soon followed her husband to the grave, confiding her child to the sole care of Bess of Hardwicke, a legacy faithfully discharged by this celebrated woman, who notwithstanding her divers faults behaved like a second mother to the little orphan.

Arabella's early days were spent at the stately Hall of Hardwicke in Derbyshire, the greatest architectural triumph of Bess, a builder on a large scale. Even in our day it is difficult to imagine anything more imposing than this ancient pile, before whose grandeur the modern magnificence of Chatsworth itself fades into comparative insignificance. There is not a nook or corner which is not replete with interest and full of historic associations. Lofty state apartments, majestic bed-chambers hung in gorgeous tapestry, still remain, as if awaiting the promised visit of Queen Elizabeth, while from its turrets, with vain hope and heartrending despair, gazed the captive Mary Stuart.

The picture gallery is 170 feet in length, 23 feet wide, and 26 feet high, ten immense diamond-paned windows

light up the priceless treasures within, and recall the saying that

" Hardwicke Hall
Has more glass than wall."

Here may be seen in dress of *craimoisi* velvet, ruff, veil, and rope of pearls worth a king's ransom, the indomitable Bess, her features as strangely resembling those of Queen Elizabeth as she was akin to her in mind and character, indicated by the haughty expression of countenance, the sharp chin, Roman nose, thin scarlet lips, all telling of boundless determination, arrogance and ambition. In those days the domineering spirit of Bess appeared like witchcraft, though in truth her influence over others was but the use of that gift described by the Marchesa Concini, as "the power of a strong mind over weak ones," a possession hated by the common herd unable to understand or fathom its source.

Bess, as we have said, behaved like a second mother to her "jewel Arabella," superintending her education, instructing her in courtly *devoirs*, and various domestic arts, confectionary, "physick" herbs, and the like, while graver matters were not neglected. The Princess already gave evidence of her talents, all were astonished at her memory, her quickness of perception, and the correctness of her speech; everything came easy to her in the way of learning, so that her lessons were to her mind like play to other girls. Sir Walter Mildmay, then on a visit to the Earl of Shrewsbury, declares her to be very pretty, and thinks she will resemble her grandmother Douglas; the quick-witted child made indeed so pleasant an impression upon this gentleman that he begged her to write a letter to Queen Elizabeth, with which "the little lady" willingly complied, saying "that her humble prayer was for her Majesty." Arabella early became the subject of matrimonial speculations; the first seriously proposed emanated from my lord of Leicester, on behalf of his only son, Lord Denbigh, by Lettice Knollys. The favorite, however, soon felt the effect of his schemes in the frowns of his royal mistress, whose smiles were only restored by the sudden death of "the noble imp," in 1584, which thus brought the negotiations to a speedy termination.

Unconscious of these ambitious plans

for her future, Lady Arabella passed her days in the usual manner of high-born girls of that period, with this exception, that by the orders of Countess Bess she was treated with the respectful ceremony becoming to her royal blood. Her progress in study is recorded as marvellous; Latin and Greek were familiar to the young student, French, Spanish, and Italian spoken by her with ease and elegance. "It was a common thing then," we are told, "to see faire ladyes so nouzled to the study of letters, that they willingly set all vain pastymes at naught for the acquiringe of learnyng." The more graceful accomplishments too were not forgotten. Many a sad hour of the captive queen did Arabella solace by her first efforts on the lute and virginals; and it is probable that intercourse with Mary Stuart made her graver and more thoughtful than young girls are wont to be. That Mary took a deep interest in this orphan daughter of her husband's house is evident from her will, wherein she commands the restoration of her Lennox inheritance, besides bequeathing to her jewels of rare value, named as "crosses, necklaces, girdles, and carcanets of fair great pearls, borders of emeralds, buttons of rubies," and so on.

As time sped on, Hardwicke Hall ceased to be a happy home for the Lady Arabella. At first the Earl of Shrewsbury appeared as enamored of Bess as his three predecessors, but this came to an end. Jealousy of Mary Stuart, pecuniary losses, heavy cares, transformed the countess as she grew older into a veritable virago, for like most worldly women she possessed few resources within herself, to enable her to meet the changes and troubles of life. Her lord's love now turned to deadly hatred; which ran him into as infatuated courses as his former passion had done, so that he declared himself "ashamed of his choice of a creature with such a *divelish* disposition." The squabbles became public enough to reach the ears of the Queen, who after a time condescended to interfere. Poor Arabella led a wretched life amidst these unseemly doings, even Elizabeth began to think of relieving the position of her young relative, when the execution of Mary Queen of Scots suddenly altered the political status of her niece.

Cold-hearted as James had displayed himself towards his mother during her lifetime, he now professed the utmost indignation at her death, vowing vengeance against England and its Queen. Then for the first time the political importance of his Cousin Arabella was brought home to him, as a powerful argument to pacify his Majesty and keep him quiet. The young Princess received a summons to Court, was made much of in public by Elizabeth, taking precedence of all as heiress presumptive to the crown. One especial mark of favor fell to her share, that of dining alone with the Queen, a boon often craved in vain by foreign princes of royal blood. Arabella would doubtless have gladly dispensed with this grace, and probably shook in her shoes through the trying ordeal, for the temper of the royal Tudor was apt to show itself rather unpleasantly in sundry boxes on the ear and pinches black and blue. Madame d'Aubespine de Châteauneuf, the wife of the French ambassador, relates :

" That after dinner on one occasion while the Queen stood in the reception gallery, surrounded by a crowd of courtiers, her Majesty asked her if she had noticed a young girl, her relative, who was there, and as she spoke she called Arabella to her side. Madame immediately praised the Princess, remarking how well she spoke French, adding too that she appeared very sweet and gracious. ' Look well at her,' said Elizabeth, ' for she is not so unimportant as you may think ; one day she will be even as I am, and will be Lady Mistress here, but I shall have been before her.' "

It is scarcely probable that the Queen had any real intention of appointing Arabella her successor, but she found it politic to keep a check on James by such speeches as these, in which light her words were no doubt regarded by the ambassadress. Lord Burghley had long been on terms of intimacy with the Shrewsbury family ; when the young Princess was left an orphan he vainly interested himself in her behalf, never failing to treat her as an especial favorite and pet. On the day that she made her *début* at Court, she supped in his house, there meeting for the first time Sir Walter Raleigh. The earliest specimen of her handwriting in existence is addressed to the old treasurer, and thus prettily expressed :

" Je priez Dieu, Monsieur, vous donner en parfaict et entière santé tous heureux et bon succès, et serez preste à vous faire honneur et service.

ARABELLA STUART."

Those who have not known a happy home, if gifted with strong affections are apt to form high ideas of domestic joy ; to them it seems a very haven of peace, a bliss brighter than any that ambition can offer, nay, ambition to them is but the path which they hope may lead to the desired goal. They long to love and be loved. That this was the predominant sentiment in the heart of Arabella Stuart there can be little doubt ; her keen intellect was, as is usually the case, accompanied by ardent and sympathetic feelings. Nature had given her a warm, passionate heart, thirsting for affection as a tropical flower thirsts for sunshine and light, and it is probable that now began those dreams of a romance common to women of her temperament, wherein Love reigns triumphant and alone. Her face was one a man might look at too often for his peace of mind. There is a portrait of her in the Chatsworth collection, which depicts her a vision of grace and delicacy, oval countenance, large blue eyes, arched eyebrows, a dazzling alabaster skin, with hair of golden chestnut, raised back from her forehead, and falling in rich curling waves over her shoulders. She wears a black dress bordered with a band of sapphires and diamonds, the bodice is cut in square mediæval fashion, leaving the front of the bosom bare, which is delicately fair, small, and childlike. Pearls encircle her throat, clasp her tiny wrists, and are twisted in her hair, while two pear-shaped pendants droop from her pretty ears. It is a face that would go straight to the hearts of most men, so tender and engaging is the expression of the eyes and lips. Her hands are marvels of beauty ; the white taper fingers rest on the silken head of a favorite spaniel, whose pert face is half buried in the folds of her magnificent dress. But none of these advantages had any effect on her destiny. None cared to woo and win her for personal or mental charms, all sought her as a political tool to further their own selfish schemes. Divers attempts were made to induce Arabella to become the head of a party inimical to Elizabeth, either by marriage with a

noble, or by asserting her claim to the English throne, but Bess of Hardwicke, who still lived, carefully guarded her granddaughter from the pitfalls of Jane Grey and her sisters. She was, however, pursued by a legion of adorers, her prospects seeming brilliant to those not behind the scenes. Suitors sought her from north to south; the king of Poland, the Duke of Parma, Henri Quatre himself raved of her blue eyes and rippling hair. "I would not refuse the Princess Arabella of England," he exclaimed to Sully, "if she were once declared heiress presumptive." So far, however, the lady was fancy free. None could boast the least favor from her hand; "her life was fairer than fair, more beautiful than beauteous, truer than truth itself" in a Court where she moved the observed of all observers, for the days of its sovereign were now drawing to a close, and few knew the secret of Cecil's correspondence with James.

About this period the Queen began to view Arabella with suspicion and dislike, even to the extent of banishing her to Lord Kent's residence, Wrest House, where, though treated *en famille*, she felt herself in reality a prisoner. To many of the English nobles the prospect of the succession of James was extremely distasteful—the gracious and winning Arabella appeared a far more desirable sovereign than the cold pedant of the north; but the political craft of Cecil and his party effectually crushed any such dreams, the unjust will of Henry VIII. was cast aside, the country saved from civil war, and a few hours after the last of the Tudors ceased to breathe James Stuart of Scotland was peacefully proclaimed. The Lady Arabella being appointed chief mourner at Elizabeth's funeral, she refused the proffered honor, saying "that sith her access to the Queen might not be permitted in her lifetime, she would not after her death be brought upon the stage for a public spectacle."

With the accession of James a new life dawned for Arabella. She created a most favorable impression upon the Queen, Anne of Denmark, when she appeared as Diana amongst the procession of nymphs who performed in Ben Jonson's 'Masque' at Welbeck, to bid welcome to her Majesty. Anne desired her company on her state progress to Lon-

don, where soon after Arabella danced at the first Court ball, "most sumptuous in apparel, and exceeding rich and glorious in jewels," probably the legacy of her aunt Mary Stuart. Arabella's position was in some respects a difficult one. Naturally generous, and not understanding, like most clever people, either the value or importance of money, caring little for its possession, she soon found herself in debt to the amount of £2000; every day she plunged deeper into difficulties, for as princess of the blood royal she was compelled to keep up a certain retinue with becoming surroundings. James allowed her an income of £800 a year, with a "daily diet" from his table, but the £2000 still remained unpaid, a constant irritating source of anxiety to her sensitive mind, economy unfortunately not being one of her many virtues. Free, however, from old restraints, she shone "the bright particular star" of a dull Court; high in spirits, winsome in manner, gentle, playful, and *spirituelle*, she became the delight of the royal *circle*, no masque or gaiety was deemed complete without her presence. Amidst the vortex of coarse dissipation presented by the Court of James, the Princess still cherished her old love for study, the few hours she could snatch from "vaine pastymes" passed in lecture, reading, and hearing of preaching. Ambitious eyes were lifted towards the fair student, but vainly, all hint of marriage being firmly and coldly silenced by her; as yet she had found none to love, and, like a true woman, no lower motive influenced her conduct. Her fate, however, waited close at hand.

The year 1608 found Lady Arabella in higher favor than ever, notwithstanding that Raleigh and others in their plots had sought to make her name a rallying cry for treason. On one occasion we hear of her at Court wearing jewels to the amount of £200,000, including the superb rope of pearls bequeathed to her by Bess of Hardwicke, deceased the preceding year, aged ninety. She left this earth unloved and unregretted, save by Arabella, a striking example of the utter fruitlessness of worldly scheming. The traveller passing through Derby may behold in All Hallows Church a recumbent marble figure stretched on a lonely tomb,

beneath which repose the mortal remains of the once celebrated Countess of Shrewsbury.

Not quite two years after her death we catch mysterious whispers of the doings of Lady Arabella, whose name is coupled with that of William Seymour, grandson of Lord Hertford and Katherine Grey, thus the direct descendant of Henry VIII.'s favorite sister, Mary Tudor, "*la reine blanche de France.*" The lovers are supposed to have first grown intimate when the Court tarried on a hunting expedition to Woodstock; in this legend-haunted bower the two met and loved. Seymour was but twenty-three, twelve years younger than Arabella; her face and manner, however, were still youthful, bright, and charming. Their tastes agreed, their natures sympathised, so that age became a mere accident, of which neither thought. At thirty-five a woman is dangerously seductive when her personal attractions are still unimpaired, especially a loving woman such as Arabella. There were depths of undeveloped passion in her ardent soul which only needed a master hand to strike the chords, and draw forth a melody so sweet and sad, that for two centuries it has awakened a touching echo in every gentle heart. Such love laughs at royal commands and privy councils, urged on too by the hot Tudor blood running in the veins of both lovers. A secret marriage was no sooner resolved upon than it took place in Arabella's apartments at Greenwich about Whitsuntide; a poor priest named John Blague performed the ceremony, witnessed by two servants and a friend of Seymour's. Like Katherine Grey, the Princess retained her place at Court until the secret leaked out. As early as the month of July we find her committed to the custody of Sir Thomas Parry, Chancellor of the Duchy of Lancaster, to be kept in his "*faire dwelling house on the banks of the Thames, near Vauxhall.*" Seymour was sent to the Tower, where the Puritan minister Melvin welcomed him with this distich:

"*Communis tecum mihi causa est carceris; Ara Bella tibi causa est araque sacra mihi.*"

which has been thus translated:

" From the same cause thy woe proceeds and mine,
Thy altar lovely is, and sacred mine."

Arabella's imprisonment at Lambeth could scarcely be called rigorous; she received permission to walk in the gardens, to retain her own servants, and even keep up a kind of establishment in the house of Parry. The keepers of herself and husband were both lenient to their prisoners, conveying letters from one to the other. There is still extant a letter written by Arabella, full of sad humor and womanly feeling, wherein she strives to cheer her "*sweet lord and master*" in his trouble, rather than dwell upon her own. It is even said that when the shades of night fell over the great city Seymour's boat would glide down the dark river to Lambeth, when for some rapturous hours the husband and wife were again reunited. But such romantic escapades soon reached the ear of James, who speedily ordered the Princess into the safer keeping of the Bishop of Durham, thus showing that little mercy might be expected at his hands.

The lifelong captivity of Katherine Grey rose in terrible warning before Arabella, rendering her well-nigh distracted with grief and terror. On the 16th of March 1610 she set out for Durham, escorted by the Bishop in person; her state of despair was terrible to behold, perspiration burst from her forehead, her brain seemed on fire; probably she then received a blow which laid the foundation of her after-sufferings. The Bishop strove in vain to comfort her by a few hackneyed phrases of resignation to God's will, words so glibly used when the sorrow is not personal; but as the pith of his discourse resolved itself into submission to the King's will, which meant separation from Seymour, his ghostly counsel seemed but an additional mockery to the already miserable Princess. Of the deep mystery of a woman's love there is no reasoning, a lesson James and his satellites had yet to learn. The agony of her feelings utterly overcame the strength of the prisoner; when she reached Barnet she was lifted from the litter in a state resembling death, a constant sickness caused by agitation fell upon her, so that all chance of pursuing her journey farther north failed. A month passed slowly by, during which period she had not walked across her room, but remained on her bed apparently stupefied with grief, or uttering

piteous cries for him from whom she saw herself parted for ever. Her letters, usually penned in such fair and elegant caligraphy, were now marred, blotted, and rambling, as if the writer had gone well-nigh distracted. Only one boon she craved from the mercy of the tyrant, union with her husband. To obtain this grace she voluntarily offered to live in a foreign land, poor, unknown, an exile, renounce even her claim to the crown, any condition, however hard, she would gladly accept, with Seymour to share her lot; but her offers and entreaties were alike disregarded by James, who neither understood nor believed such disinterested affection.

One hope alone then remained to Arabella, escape from the power of her jailor. She had still many devoted friends; her Aunt Mary, Countess of Shrewsbury, warmly espoused her cause. By fair means or foul, she resolved the husband and wife should come together again, in the hope they might yet leave a child to inherit their claim, and perhaps even wear the crown. She contrived, by what means is not now known, to send Arabella a plan of escape, also the sum of £14,000 nominally to pay her debts, which had evidently mightily increased by this time, but in reality for the purpose of bribing those around her, or for such expenses as were inevitable in the scheme proposed. Arabella found little difficulty in gaining the good-will of her attendants; amongst her many merits this royal lady possessed the Stuart gift of making all her people love her, she had the crowning grace of high birth and breeding which is called courtesy, her natural nobility preserving her from all feelings of that contempt for others beneath us, the sure sign of a vulgar, mean, and narrow mind.

The Princess did her part as women always do with singular and ready wit. Disguised as a cavalier in black locks, cloak, and doublet, a rapier by her side, she sallied forth with all the easy *nonchalance* of a town gallant, her two attendants closely following her steps. Recent sufferings, however, told upon her frame so severely, that when she reached the "sorry Inne" where horses awaited the party, the ostler seeing her mount exclaimed, "That gentleman will hardly reach London." Love and hope can

work wonders: like two wings they bore her safely to Blackwall, the place of rendezvous for Seymour, who had also received the means of escape.

But no Seymour made his appearance, she waited hour after hour till delay became fatal, at length reluctantly entering a small boat which put her on board a vessel bound for France. Here Arabella acted like a fond and foolish woman, imploring the captain to remain at anchor for a time, in the hope of Seymour's arrival, her heart tortured by the reflection that she might be the cause of ruin to her husband should he come to find the vessel off. Much valuable time was thus lost before they set sail. Seymour, however, had better luck. Discovering when he arrived at Blackwall that Arabella had been and gone, he embarked in a common packet for Ostend, which he reached safely, full of hope, high in spirits, believing his wife to be securely landed on French ground.*

The truth soon spread that the birds were flown; great was the hue and cry, hunt and pursuit on every side. James behaved like a maniac, he saw now the danger of driving a woman to despair, a thousand possibilities racked his cowardly heart and weak brain. In the dead of the night, messengers went galloping madly to all the ports of England, with orders "to search shippes, barkes, and vessells for Lady Arabella." *The Adventure*, commanded by Admiral Monson, was soon on the track, guided by the information of the watermen who had rowed Arabella to the ship, their suspicions having been raised by the "marvellous faire hand" of the young cavalier. Coming up with the French vessel the admiral, after having vainly challenged her to surrender, fired a broadside, which soon brought her to a stop. Arabella seeing all hope over made herself known to the captain, when Monson boarded the ship loudly demanding Lord Seymour. She bravely answered she had not met him, but had every hope in his safety, declaring that her joy at his greater luck was more heartfelt than regret over her own capture.

* Seymour lived to wed a second wife, to romantically devote himself to Charles I., and be created Duke of Somerset at the Restoration.

Bitter days were now in store for Arabella. Conveyed to the Tower she was placed in rigorous confinement, a fate shared by Lady Shrewsbury and all cognisant of her flight. Who can describe the agonising despair of the lonely Princess! Fiction, however, highly colored, gives but a faint idea of the real sufferings of the human heart when separated from all it loves and cherishes upon earth. Her mind became confused with the magnitude of her sorrow, her body wasted and worn by sleepless nights, her nerves destroyed by days filled with

"Aching of heart, the restless unsatisfied longing,
All the dull deep pain and constant anguish
of patience."

At times, possibly in imitation of her loved and lovely aunt, Mary Stuart, she plied her needle, or touched her well-worn lute, or again poured forth those heart-rending appeals to the merciless James which draw tears even now when read by the most worldly. But mercy came not, and was looked for in vain, till hope deferred made her heart sick even unto death.

"Where London's towre its turrets show
So stately by the Thames' side,
Faire Arabella, child of woe!
For many a day had sat and sighed :
And as she heard the waves arise,
And as she heard the bleake windes roare,
As fast did heave her heartfie sighes,
And still so fast her teares did poure."

Old Ballad.

A darker shadow yet fell over the un-

happy lady—she was fast losing her reason; the brilliant intellect, the sunny wit, the high spirit were quenched in gloom. Man's cruelty had done its worst. Three years passed away in hopeless waste of love and life; when about March 1613 the poor captive of the Bellfry Tower was declared "distracted" by the physicians. At times her mind showed signs of its former brightness, a feigned cheerfulness took the place of her wild despair, but these transient moods were more painful to behold than her total aberration. Thus she drooped day by day: tender, gentle, and forgiving to the end was this royal Ophelia. "On the 25th September 1615," says Nichols, "that ill-fated and persecuted lady, Arabella Seymour, died in the Tower." For her the bitterness of death had long since passed, the book was written, the story ended, the tragedy played out, the weary woman fell asleep in peace, resting till morning dawns.

In the dead of a September night this royal daughter of the Stuart race was carried from the Tower to Westminster Abbey, without service or ceremonial, and laid beside her aunt, Mary Queen of Scots. For two centuries her ashes have there reposed; no monument, not even an epitaph, yet marks the spot, but as long as England lasts one page of its history will be tear-stained wherein is recorded the unhappy fate of the Lady Arabella Stuart.—*Temple Bar*

THE NEW RELIGIOUS MOVEMENT IN FRANCE.

THERE is perhaps no question which is so profoundly moving the minds of men at this moment in some parts of Europe, and above all in France, as "the religious question." It might be interesting to reckon up the number of pamphlets and articles which have recently appeared, bearing the title, "La question religieuse." Any one in the habit of conversing with Frenchmen at this period can hardly fail to be struck with the way in which, whatever be the subject of conversation, it generally inclines ere-long in the direction of that all-important topic.

There is probably more of dogmatic materialism and of indifference to re-

ligious questions amongst educated Englishmen at the present time than there is among the same class in France, the country to which the considerations in the present paper are to be applied.

We have been accustomed to look upon France as the stronghold of that scepticism and levity in regard to religion which are the natural reaction against superstition, and the unwarrantable assumptions of ecclesiastical authority; yet in this very country there is now an earnest spirit of inquiry, and amongst some of its most thoughtful men there appears a kind of agony of desire to shake off on the one hand the old incubus of priestly rule, and to escape, on

the other, from the deadening influence of atheism. The extent to which this movement in France is already developed is as yet but little known in England ; yet assuredly no subject could be of deeper interest to all who are watching with sympathy, not unmixed with anxiety, the present wondrous resuscitation and firm upward progress of that scourged and humbled, but courageous and indomitable French people. All eyes, it may be said, are turned just now upon France ; for indeed there is no earthly sight more worthy to attract the reverent gaze of men than that of a people, after almost a century of despotism, alternated with the constantly renewed anguish of unfruitful revolution, patiently struggling into freedom, and pressing onward to a higher moral and social existence. "Despotism may govern without faith," says De Tocqueville, "but liberty cannot." Religious faith is more needed, politically speaking, in democratic republics than under any other forms of government. How is it possible that society should escape destruction if the moral tie be not strengthened in proportion as the political tie is relaxed ? and what can be done with a people which is its own master, if it obey not God and conscience ? This truth begins to dawn upon the minds of certain French patriots, among whom is observable a kind of trembling anticipation of the danger which their country's future will incur, if her newly-attained liberties are not based upon moral convictions having their root in religious faith. Some of the literary men of France who but a few years ago styled themselves *Libre-penseurs*, in the full sense of being without any positive faith whatever, are now sincerely inquiring concerning God and the future state, and groping for an anchor by which to hold the vessel of their beloved and long-sought Freedom in calm and safe waters.

Beyond this sincere inquiry after a religion which shall give stability to their political institutions, there appears to exist, further, a yearning for religious truth for its own sake. "Man does not live by bread alone," says a contributor to the contemporary literature of France ; "he lives also by ideas, by justice, by charity, by liberty, by faith ;

and these are among the words which go forth out of the mouth of God." Victor Hugo, who in his best moments gives utterance to the higher impulses of the mass of the people, writes—

" Let us not forget, and let us teach it to all, that there would be no dignity in life, that it would not be worth while to live, if annihilation were to be our lot. What is it which alleviates and which sanctifies toil, which renders men strong, wise, patient, just, at once humble and aspiring, but the perpetual vision of a better world, whose light shines through the darkness of the present life ? For myself, I believe profoundly in that better world ; and after many struggles, much study, and numberless trials, this is the supreme conviction of my reason as it is the supreme consolation of my soul." . . . " There is a misfortune of our times," he continues, " I could almost say there is but one misfortune of our times ; it is the tendency to stake all on the present life. By giving to man, as a sole end and object, the material life of this world, you aggravate its every misery by the negation which awaits him at the end ; you add to the burdens of the unfortunate the insupportable weight of future nothingness ; and that which was only suffering, that is to say the law ordained of God, becomes despair, the law imposed by hell. Hence our social convulsions. Assuredly I am one of those who desire, I will not say with sincerity, for the word is too feeble, but who desire with inexpressible ardor, and by all means possible, to ameliorate the lot of all who suffer ; but the first of all ameliorations is to give them hope. How greatly lessened are our finite sufferings when there shines into the midst of them an infinite hope ! The duty of us all, whoever we may be, legislators and bishops, priests, authors, and journalists, is to spread abroad, to dispense and to lavish in every form, the social energy necessary to combat poverty and suffering, and at the same time to bid every face to be lifted up to heaven, to direct every soul and mind to a future life where justice shall be executed. We must declare with a loud voice that none shall have suffered uselessly, and that justice shall be rendered to all. Death itself shall be restitution. As the law of the material universe is equilibrium, so the law of the moral universe is equity. God will be found at the end of all."

The present religious movement assumes, as has been said, a position more or less of antagonism on the one hand to Jesuitism, and on the other to unbelief. M. de Pressensé has described in a recent number of this Review the present aggressive character of the Ultramontane party, as a party hostile, of course, alike to the Republic, and to liberty of conscience in matters of religion. It is no decrepit foe which has to be met on this side, but a vastly organized and sub-

tle power which, in proportion as it has lost its hold on the conscience of the more instructed of the people, endeavors to strengthen itself and its temporal means of aggression by an alliance with the political party of reaction in all countries. There are in France many loyal and sincere Catholics who look with suspicion on this encroaching power. Roused to the recollection of the position held by the Gallican Church in times past, these liberal Catholics now aim at a return to the independent position which that Church formerly held in relation to the see of Rome. There is, we are told, in Gallicanism a political principle still respected by many French Catholics,—a principle to which the French Revolution gave a still broader expression,—that is, the right to guard against ecclesiastical encroachments in secular matters. For some years past, in the constantly increasing conflict between the Ultramontanes and the Gallican liberals, there have been repeated attempts on the part of the latter, by having recourse to the common law of the realm, to check the illegal encroachments of the Clerical party acting upon orders direct from Rome. To obtain any sure victory, and to free religion in France from vassalage to the Pope, nothing less, it is believed, will suffice than the complete enfranchisement of all forms of worship, and the final separation of the Church from the State. This last is a step dreaded by the Ultramontane party, for, as M. de Pressensé says, "it knows that on the one hand the Church of the minority would find in a free propaganda the means of effectually counterbalancing its power; and on the other, it is conscious that under the delusive cloak of outward unity, there are influences at work in its own body which might issue in resistance and reform." It is of some of these influences that I am about to speak.

The energies of the small Protestant communities in France have been for many years mainly applied to the work of self-defence, and of maintaining their own existence against the opposing elements in the midst of which they are placed. From this society Jesuitism had little to fear; but when apostles of free worship and liberty of conscience begin to rise up from the ranks of Catholicism

itself, it must be recognized that the outward garb of unity is to some extent at least deceptive.

The fierce persecutions inflicted upon the Huguenots in the seventeenth century had the effect of creating a distinct and separate people in France, who for a long period lived very much as the Jews did in the middle ages,—outlaws, without political rights and without a nationality, but closely allied in a confraternity of their own, embracing their scattered members in exile in all lands. Thus violently and for a long time thrown upon their own resources, and often forced to foreign enterprise, the Huguenots became an energetic and independent people, and attained to an intelligence considerably greater than that of their persecutors, in the affairs of this life, as well as of those of the life to come.

About the date of 1830, after the close of the inept government of the Jesuits under Louis XVIII. and Charles X., a great impulse was imparted to industry, to education, and to various public works, of which the Protestant descendants of the Huguenots were the life and soul. Protestant influence increased during the ascendancy of Guizot. Most of the principal industries of France, the silk mills of Lyons, the calico factories of Mulhouse, the manufacturers of Creusot, the great foundries almost everywhere, were and are in the hands of the Protestant families of Arlès-Dufour, Schneider, Dollfuss, Koechlin, Japy, Morien, Peugeot, &c. Under the second Empire, many of the most prominent financiers and bankers were on the one hand the Jews, the Rothschilds, Pereiras, &c., and on the other the Protestants, Rougemont, Hottinger, Das-sier, Bartholony, the Prefect Haussman, &c. At the present time many important offices in the Government, in public works, education and foreign affairs, are under the direction of Protestants, as, for example, of Say, Freycinet, and Waddington. The chief of the administration of the Exhibition of last year was the Protestant Senator Krantz, an Alsatian. Examples might be multiplied in this direction, and the fact is striking when considered in connection with the enormous numerical preponderance of the Catholic population in France.

It might appear from the above that the principles of Protestantism, in the persons of its orthodox and somewhat aristocratic leaders, are making advances in France, and that certain hopes for the future good of the country might be built upon the fact. But here we are compelled to pause, and ask what amount of real religious vitality capable of transfusion into the veins of the young Republic, dwells in the community represented by the names just cited. The Israelites are not the only persons who may be accused of subordinating higher aims to the amassing of wealth. *Enrichissez-vous!* is said to have been a favorite injunction of Guizot to his brother Protestants. His policy has not been neglected by those who survive him ; witness the three thousand millions (francs) of M. Freycinet for public works, which recall to mind the national *ateliers* of unhappy memory. As a fact, wealthy Protestantism in France does not inspire complete confidence in regard either to true republicanism or to the spread of a vital religious faith. Its ascendancy might possibly lead the nation gently back to Orléanism, and from the point of view of religion and public morality it offers little better guarantee than a *monarchie bourgeoise*, with its national clergy, and its respectable prefects and chiefs of *Bureaux des Meurs*, its Delesserts and Mettetauts. The cold worship and scantly filled churches of some of their well-known preachers do not indicate a large amount of the living fire of propaganda in their midst. The charge made against the party may not be wholly undeserved, that " content with the comparative toleration granted to it by the State, French Protestantism is satisfied to live, without aspiring to conquer. Glad to enjoy peace, and, unhappily, sometimes distracted by intestine disputes, it is not unfrequently the first to discourage those who, for conscience' sake, speak of things distasteful to the Government, or who would dare to encounter the risk of fresh persecutions."

Whence, then, are the apostles of any religious reformation in France to come? Mention may be made of some who have openly entered the lists against the two-fold enemy, Jesuitism and Scepticism, though it would be premature to pronounce an opinion on the probability of

any of these becoming true apostles of a revived spiritual faith, and probably the means by which they work their propaganda will not meet with universal approval. The movement initiated by them invites, however, our watchful and sympathetic regard.

M. Renouvier and M. Pillon are names which appear in the forefront of those who are promoting the present movement for religious and moral reform. They are editors of *La Critique Philosophique*,* a political, scientific, and literary review of high merit, in which the religious movement in France is dealt with in a serious and philosophic spirit. M. Leon Pilat, editor of *L'Eglise Libre*, ranks as a fellow-worker with the above.

The name of Eugène Reveillaud has attained some notoriety in France since the publication of his book, "La Question Religieuse," in 1878.† This book sets forth the conviction of its author that France has only one sure means of securing the stability of her free institutions, namely, by shaking off completely and finally the yoke of Clericalism. Reveillaud, born and educated a Roman Catholic, declares himself while writing this work to be a freethinker ; in the name of freethought, he attacks Obscurantism and Ultramontanism directly and simply. This book obtained a rapid sale, and was read with complaisance by thousands ; Republicans and Orléanists alike applauded a campaign in which no moral effort was demanded from themselves, and which simply tended to lessen the influence of Legitimists and Bonapartists, the allies of the Roman clergy. Reveillaud was at that time the right man to select as director of a popular journal such as the *Anti-clerical*. His book is worthy of perusal. He evinces no spirit of antagonism to Christianity ; on the contrary, he urges from the point of view of a politician that religion is necessary for a nation, and that France's liberties can only be securely built, as the liberties of England after our own great revolution were, on a basis of religious and moral convictions rooted in the hearts of the people,

* Published in Paris, 54 rue de Seine.

† *La Question Religieuse et la Solution Protestante.* Grassard, Paris

and infused into popular education. Catholicism, he asserts, cannot longer suffice for this ; for Catholicism is henceforth, as it has for long been, identified with Jesuitism and the centralized rule of Rome, encroaching and strangling ever more and more the independent existence of the Gallican Church, and setting at defiance freedom of conscience. It cannot, he says, be the religion of the citizens of a free country. On the other hand he sees, still judging as a philosopher and freethinker, that there is a subtle connection between materialism and despotism ; he looks around him, longing for a sublime idea, a pure faith, for the wearied and sceptical French mind to lay hold upon. He can find no idea so sublime as the central idea of Christianity ; and in examining this, he is impelled to record the attraction he feels towards it, and the ardent admiration with which it begins to inspire him. At a later period, he said, "led by patriotic reasons to study this question, I became intellectually convinced." This intellectual conviction leads him, in making a comparison of the religion and policy of Jesuitism with Christianity, to say—

"Jesus planted his standard so high above our horizon that all humanity may gather beneath it ; and if the shadow of his cross, falling upon the whole world, has caused virtues alone to spring up, has developed only a law of love and fraternity, who would not feel himself honored to be called a Christian ? But I am told the facts are quite the opposite ; what crimes, they say, have been committed, what massacres ordained, in the name of Christ and in the interest of his religion ! I reply that we must not confound Christ with the Church. The crimes of St. Bartholomew and the Dragonnades were not facts of Christianity, but the consequence of a sacerdotal system which has prevailed and has been the misfortune of centuries in the organization of the Roman Church." . . . "If Socrates," he asks, "had had false disciples who filled the earth with crimes and wars, would you for that reason condemn Socrates ? We do not aim at destroying Christianity. Let it be well understood that we can never effectually destroy except by replacing, and we must combat Clericalism by Christianity. . . . Let us then tear from the hands of our enemies the standard of Christ which they have appropriated and dishonored, and let us rally round it ourselves, claiming for ourselves their watchword : *Hoc Signo Vinces !*"*

A prominent aim in the programme of

the new reformers is the restoration of family life in France :—

"No assertion," says Reveillaud, "is more hackneyed than that 'religion is necessary for women and children ;' the same spirit which gives utterance to it prompts the saying which we daily hear in certain circles, and which is worthy to figure among the aphorisms of Joseph Prudhomme, that 'religion is necessary for the common people.' Whence these scornful distinctions ? Either religion is good for none, or it is useful for all. Whether considered as a restraint against evil or a motive power for good, assuredly the aristocracy has not less need of such restraint and such a motive power than the common people. The father of a family allows that, as a guarantee of morality, religion is necessary for his wife and child ; has not the wife precisely the same reasons for desiring religion for her husband ? and has not the child a right to ask of his father why he does not set him an example in the things which he prescribes for his child ?"

"Build up again the family," says Michelet, "the true and natural family. The fireside is the foundation of all. All life is built upon it. Where that is shaken all is shaken ; when family life is feeble and disunited, the State has no solid base on which to repose ; in vain it seeks for another ; like a sick man it turns and turns again upon its couch, and finds no other position in which it can rest."*

The desire for the restoration of family life appears in France to be keeping pace with the spirit of religious inquiry, and forms one of the clearest notes in the cry arising from the heart of the nation, "What must we do to be saved?"

In the autumn of last year, the Protestant Evangelical journals of France were full of the case of a remarkable conversion which had taken place, sudden as that of St. Paul on his way to Damascus. The subject of this conversion was none other than Eugène Reveillaud. Ascending one day a Protestant pulpit, in a crowded church in the south of France, Reveillaud gave an account of what had occurred to him the previous night ; he spoke of a vision, a sudden light, a baptism of grace which was vouchsafed to him. He had before him a sympathetic and awe-struck audience, and the news of this public declaration flew rapidly through the whole Evangelical community, not only of France, but of our own country. It need scarcely be said that the event was judged from very different points of view by different persons, some applauding the fervor and simplicity of heart which

* *La Question Religieuse*, p. 64.

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* Michelet : *La Réforme*, p. 104.

had induced the young convert to declare himself, even with greater precipitation than St. Paul, an apostle of the pure gospel ; others doubtfully reserving their judgment, while others openly condemned the want of delicacy or of prudence, as it seemed to them, in the publicity courted and given to this circumstance. The Evangelical party in France are however for the most part convinced that this is a genuine and astonishing conversion ; and there is indeed nothing to disprove that it is so ; for Reveillaud has at least sacrificed to his new convictions the honor of being the leader of a party of which he might probably have been *facile princeps*. He has definitely retired from politics, is engaged in missionary tours, and is studying theology, it is said, with a view to the regular exercise of the Evangelical ministry. As a preacher he has great power. It is stated on the authority of the Rev. George Fisch of Paris that at one single meeting lately addressed by Reveillaud at Bourg, "one hundred and fifty Roman Catholics were brought over to the Protestant Church."

Dissatisfaction with the rule and teaching of the clerical party (it can hardly be said of pure Catholicism) is widely spread, and daily increasing in France. This dissatisfaction, coupled with a repudiation of materialism and an acknowledgment of the need of religious faith, is to be found expressed in varying forms and degrees in the following works which are gaining popularity : "La Question Religieuse Contemporaine," by M. A. Jacob ; "La Liberté Religieuse," by Emilio Castelar ; "L'Avenir des Peuples Catholiques," by Laveleye ; "La Cour de Rome et de France," by Vallon ; "Le Mouvement Contemporain des Eglises," by the Abbé Michaud ; "La Papauté antichrétienne," by the same ; "Le Cabinet de Jésus," by René Maral ; "Partie Perdue," by d'Alviella ; and lastly, the Review before named, the *Critique Philosophique*, and the popular tracts of Paul Bouchard—"La Servitude Volontaire," "Simples Lettres d'un Bourguignon," and "Dieu et Patrie."

A brief sketch of the last-named author may be of interest. Paul Bouchard is the proprietor of great vineyards in the neighborhood of Beaune in

Burgundy, whence Beaune wine takes its name. He has lived the greater part of his life in his native town of Beaune, where he has children and grandchildren, and was for a long time surrounded by a bright family circle. He is now advanced in years, but continues to be a man of bright and cheerful temperament, hopeful in spirit and genial in manner. He was mayor of his native city for some years, during which he was an active and successful reformer of the institutions and morality of his town. He is a musician, and the children of Beaune are accustomed to march and dance to music composed by him, in the merry vintage season, after the sun has gone down. Trials fell upon him, however, in the death of his wife and the dispersion of his family. His mind had been for many years exercised by the anomaly of the "priest in the house." He observed the evils of the influence thus introduced into domestic life, the estrangements consequent upon it between the men and the women of the same household which otherwise would have been united,—that estrangement being often the greatest in matters of faith the most vital. After many years of internal conflict M. Bouchard sent to the bishop of the diocese in which he lived the following declaration :—

"MONSIEUR,—I have the honor to address to you the following declaration, you alone having the right, as bishop of this diocese, to receive it.

"Every day we see the ministers of the Catholic priest carrying to their last resting-place the mortal remains of men who have been all their lives estranged from Catholicism, and have even fought against it.

"The Church urges in these cases, in order to justify its intervention, that these men having been born in its fold, and having been retained in it by the sacrament of marriage and the baptism of their children, have continued to be Catholic in spite of their protestations to the contrary.

"How, then, can such men, bound by such religious acts as the above-mentioned, free themselves from their engagements, except by another act having the character of a deliberate resolution openly avowed ?

"This act is a public abjuration. It is to this act that I have recourse in order to escape from the false and troubled situation in which for many years I have been placed.

"In taking this step I fulfil a duty which I owe alike to conscience and to loyalty.

"I declare, then, Monsieur, that I now abjure Catholicism and embrace Protestantism, the Reformed faith alone being able to

deliver us from the dangers which threaten us on all sides."

There here appears a simple and quiet conviction of the judgment. It is no declaration of a heavenly vision, or of a sudden enlightenment or baptism from on high. It is characteristic of the reserve regarding himself and his mental experience which marks the utterances of Bouchard even when most ardently inviting his hearers to embrace simple evangelic truth.

In June of last year (1878) Paul Bouchard gave a conference at Geneva, where, after having recalled the successive shocks to which France had been subjected since the reigns of Francis I. and Henri IV., he proceeded to show that the revolution of 1830 had failed to procure substantial good for the country, owing to the absence of religious faith in its promoters and in the people. Coming down to the present time, he concludes by saying, "There is an absence of all religious life in the great tide of our national life, and there lies the source of all our troubles. O my dearly loved country, could I but see rekindled in thee the fire of a living faith, that element so indispensable to the life of nations, and which is threatened with complete annihilation through the monstrous alliance of scepticism and ultramontane Catholicism!"

Since then M. Bouchard has been going from town to town in France, holding popular conferences. His propaganda has a character partly political and partly religious. His appeals are addressed to the mass of the people; working men crowd to his meetings. He professes simply and clearly on every occasion Evangelical Christianity, while he avoids, strictly speaking, "the language of Canaan," thus failing to win the entire confidence of some of his Protestant contemporaries. His tracts are widely circulated; "Dieu et Patrie" is addressed to women, on whom he presses the advice (dangerous, as some would esteem it), to think and judge for themselves. He impresses upon them the thought of their own dignity as human beings directly accountable to God; he invites them to reject all human intermediaries in approaching God, and to take as their guide the words of Christ, "Enter into thy closet, and pray to thy

Father which is in secret." He declares that no true work of emancipation can ever be achieved in which women are not included, and appeals to the women of France to show themselves true patriots, as well as true wives and mothers. One who has observed his career writes of him:—

"Bouchard has, in my opinion, the immense merit of having proclaimed, in the midst of our great world of politicians, men of wealth, business men, and administrators, the supremacy of the moral law, the rights of conscience and the value of the religious sentiment. His utterances as a religious man not avoiding politics, and a political man daring to preach Christianity, render his position so extraordinary that his voice has jarred like a false note in a concert; every one turns his head to the side whence it comes with a movement of surprise not unmixed with impatience. Abandoned by many of his former political friends, regarded with more or less of suspicion by the orthodox Protestants as having stopped half-way, his position is not an enviable one; nevertheless his courage does not fail him, nor has he lost the confidence of his most distinguished friends. There has never been the slightest flaw in his reputation as a private man, or as a man of business and a great merchant. He has been twenty years a widower; his youth was not less pure than is his green old age."

Bouchard has none of the characteristics of the subtle conspirator, nor of the fierce revolutionary, nor yet is he purely a missionary; he is witty, amiable, and social. Sober and moderate in his manner of living, he yet possesses an infectious joviality. His character does not, in fact, accord with the usual idea of a reformer; nevertheless there were not wanting some of these elements in Luther and Zwinglius. The lively energy of his character may be illustrated by the following incident. In September last, at the most crowded period of the Paris Exhibition, M. Bouchard happened to be seated on the top of an omnibus, passing through one of the principal streets. He caught sight of an influential Deputy driving past in his open carriage. Happening to want the help of this Deputy in connection with his work, without waiting for the omnibus to stop, the old man dropped down, quick as thought, from the top, threaded his way rapidly through the labyrinth of vehicles which thronged the densely-crowded street, and leaping into the carriage of the Deputy while the horses

were in full trot, he seated himself by the side of the astonished gentleman, and, in reply to his question, "Whence come you, and for what?" said merrily, "It is providential, sir, like the appearance of Philip by the side of the Minister of Queen Candace." He then went on to expose his errand and wishes, and gained his point.

In November, 1870, during the Franco-German war, Gambetta wrote to Bouchard from Tours: "Your letter on the affairs of Dijon is very good; a functionary with convictions such as yours remains at his post through every difficulty, and I count upon your remaining at Beaune even if it is invaded. *We need men like you.*"

In 1873, Bouchard essayed to communicate to Gambetta a sense of the necessity of facing frankly the religious question for France, and wrote to him as follows:—

"**MY DEAR GAMBETTA.**—On all sides the Clerical party is strengthening its organization, and is armed to the teeth; while, by the side of this increasing force, the Republican party is content to look on, inactive and careless, as if there were not, for it, the smallest possible danger. Now, I ask whether it is not very unwise in us to stand thus, passive spectators of this preparation for events which will concern us closely, and whether it would not be more prudent that we should understand each other, and be prepared. None can better than yourself indicate the measures which we should adopt. It is difficult to adopt any united action in the provinces without some indication; but such indication on this question is absolutely wanting on the part of our natural leaders. Speak then to your countrymen! rouse them from their timidities; stir them to vigilance; pour a little leas of rosewater into their cup; this is no time for honeyed words. Liberty claims a severer service than this from those who are its appointed guardians."

There is something profoundly pathetic in the appeal which Bouchard has just made to his former friend, in the shape of a letter entitled "To Leon Gambetta from a Bourgignon," dated February of this year. The old man has quitted his provincial home, his vineyards and his children, and is now living in a garret in Paris, practising the strictest economy, and endeavoring to collect, by ceaseless efforts, a sufficient capital with which to start a journal intended to be the organ of his movement.*

* This journal, to be named *Le Réformateur*, is advertised to appear on the 16th of April of this year, published at 8 rue d'Argout, Paris.

He writes as follows to Gambetta:—

"I address myself to you, my friend, because you are the personification and the most authorized representative of our French democracy, and have become to a great extent its guide. Having watched your career since 1870, first as a great patriot, then as a skilful politician, always an incomparable orator, I cannot but be grateful to you for the services you have rendered France. Every one crowds to hear you speak; those afar off read the report of your words, friends and enemies wrangle over your discourses; the homage rendered to you is magnificent, and you have a right to rejoice in it because it is deserved. But do you realize fully the immense responsibility in the charge of souls which results from it? You desire the happiness of these multitudes, of these poor and simple men, and yet you say to them, 'after this life annihilation; when the body dies all dies.' If you do not assert this in these precise words, yet this sentiment flows from all that you write, from all that you speak; you cause it to be but too often heard. The doctrine of those who reject all idea of God has recently been formulated in the organ of one of its most fervent upholders, Edmond About. 'The morality of the future,' he says, 'is one in which science will take the place of revelation, and it is we who are now creating it' (*Le XIX^e Siècle*, Nov. 3, 1878). It is true that in the same journal M. F. Sarcéy, co-editor of M. About, writes:—'The old dogma has perished; the ancient worship has fallen and turned to dust; there is nothing to replace them. On the one hand men suffer, on the other they seek.' The language of these fellow-workers is scarcely in agreement, but they continue to preach the same doctrine: 'Believe in nothing but in facts such as you can see and touch and as can be demonstrated by experimental science.' As for the soul, our future destiny, eternal justice,—proclaimed in every age by the greatest minds, the Socrates, Platos, Newtons, Pascals, and so many others,—these are but romances, fairy tales unworthy of our attention. Then there is He who submitted to be nailed upon the cross to save men from servitude. But of Him men speak no longer in these days! . . . 'After this life annihilation!' What despair for the masses whom, nevertheless, you love! How then do you propose to support or console those who, tried and suffering all their lives, have nothing to hope for, who expect nothing and believe nothing except that the grave will be the end? What explanation will you give them of that strange sight of which we are, alas! daily witnesses,—the sight of an honest man ruined by a knave? the knave dies after a full and enjoying existence; the virtuous man remains and suffers to the end. In this we have a complete and monstrous inversion, not only of the moral law, but of the most elementary notions of equality and justice. Religious faith alone solves the problem; religious faith is the pivot of the human soul; it is riches to the poor; to destroy it is to disinherit the masses of their most precious possession.

"And when you shall have created a nation of materialists, what will you have produced?

Desperate covetousness, insatiable appetites, unrestrained ambition, and incessant revolution arising from the conquest of the good things of this world, not by slow, persevering, honest work, but by political games of chance, immoral enterprises, deceits, robberies, and lastly, force. Do you not see that this is to open the door not to legitimate revolution, but to cataclysms?

" You are in the prime of life, my friend ; I am in the decline. Old age has duties towards those whom it believes to be the most able to profit by its warnings. Having in past years shown me some confidence, will you not listen to me once more to-day ? It is true that since those years I have pursued a path which I have reason to believe has not pleased you. Have you a better one ? Have you any means at all by which you propose to yourself to combat the evils which daily increase around us ? Liberty cannot exist with Ultramontanism, whose principles are domination and servitude ; neither can liberty exist with Atheism, which denies God and the future life.

" Concerned only with ourselves in the narrow limits of our terrestrial wants, our passions and our appetites will become our only motive-power. We shall become their slaves, and there are but very few steps from this to becoming the slaves of any Cæsar who may arise. This, my friend, is what I wished to say to you, as I have said it to all the other men of the Government.

PAUL BOUCHARD."

A marked peculiarity in Bouchard's campaign is the urgency with which he recommends his hearers of the humbler classes to join themselves, when convinced by his arguments, to the nearest Protestant church they can find. Why, it is asked, counsel such a step ? Protestantism may become, nay sometimes is, as dogmatic and formal as Romanism, though not so domineering. Why not invite those who desire to be free from the yoke of Jesuitism to become Christians simply, and to drop all sectarian and party titles ? Such a question may naturally be asked in England ; but if we imagine ourselves in the position of the masses of the poorer people of Catholic France, we shall see common sense and reason in this advice of Bouchard—nay, even its necessity for the success of his movement. For marriages must continually be celebrated, infants must be baptized, the dead must be buried. The mass of the people, though they may be ready to accept civil marriage, are not prepared to give up the baptism and religious dedication of their children, nor to bury their friends without a prayer or an expression of Christian hope, or the benediction of a Chris-

tian minister. To absent themselves altogether from religious worship, and to abandon every Christian rite, would appear to them, and often be to them, practical atheism. The wife will not be easily persuaded to see her husband or son on his deathbed without inviting the presence and consolations of some minister of religion ; and so long as, in every hour of need, and in all the great events of life, recourse must be had to the priest, priestly influence will continue to dominate, and the people will continue to be bound by superstition. But if a minister of the Reformed faith can be found at hand, and if the people will go and hear the evangelist proclaim in his own church or schoolroom, or by the wayside, the truths of Christianity in a language understood by all, then, argues Bouchard, light will visit the conscience, it may be, and peace the heart, while the outward supports of religion and its rites adapted for special emergencies will be equally available and observed.

There is a dark, a very dark side to the hopeful picture thus briefly sketched. Usurpers, both political and spiritual, are lurking on every hand, sleepless, vigilant, and ready to seize the first occasion which may arise of re-establishing a despotic rule ; some of the Republican leaders, the most loved and trusted by the people, are openly-declared Atheists, and have no nobler advice to give to the masses than—" Enjoy life ; amuse yourselves ; get rich." A deeply rooted scepticism prevails among the masses of the population, nourished and intensified not less by the travesties of Christianity daily witnessed by them, than by immoral habits which have become institutional in France, and have eaten like a canker into the heart of domestic life, poisoning the relations of the sexes, and blighting that respect for womanhood without which no race of man was ever blest. The exploitation of the daughters of the people is still carried on with a high hand under official and governmental superintendence. There are in France traditions and institutions so base, so profoundly immoral, and necessarily so tyrannically despotic, as to call forth the assertion lately made, that in respect to them " the Republic finds itself in face of a grave alternative ; either liberty must kill these institutions, or these institu-

tions will kill liberty."* For the overthrow of such "bastilles of corruption," as these abominations consecrated by long custom are now usually designated, no mere wave of an official wand, no legislation of the Chambers, will now suffice. Their walls have been too powerfully built up, generation after generation, under the patronage of the rich and vile, and with the consent of egoists of every class. Nothing less than the force of the awakened conscience of the people will suffice for their demolition, and this awakened conscience will respond alone to the breath of the Spirit of God, unlocking the sources of spiritual life, and quickening the deep sense of individual responsibility towards the moral law. "However we may try to explain it," says Reveillaud, "there comes in the history of nations, as in the lives of men, a solemn hour, when the hand of the Lord seems stretched out to deliver, when the Divine breath, like the wind which bloweth where it listeth, specially visits the hearts of men." Is that hour at hand for France? Who can say? We can but gaze with hope for the coming dawn. The darkness has given place to twilight. Missionary effort is doing something. The Paris police have lately given their testimony to the greater sobriety, industry, and domestic morality of the working population in the Belleville quarter of Paris, consequent in some measure on the unwearying efforts, for several years past, of Mr. McAll and his strong band of fellow-workers. Protestant pastors are aroused to an honorable competition in this moralizing work, to which many large-hearted Catholic men and women bring a powerful contribution. Out of the heart of the Catholic Church itself have arisen some of the most eloquent religious reformers, and pleaders for a return to primitive purity in Christian doctrine, and in family life.

When the Spanish Cortes reopened in March, 1876, after the restoration of Alphonso XII., the majority of the Government resolved to annul the decrees of

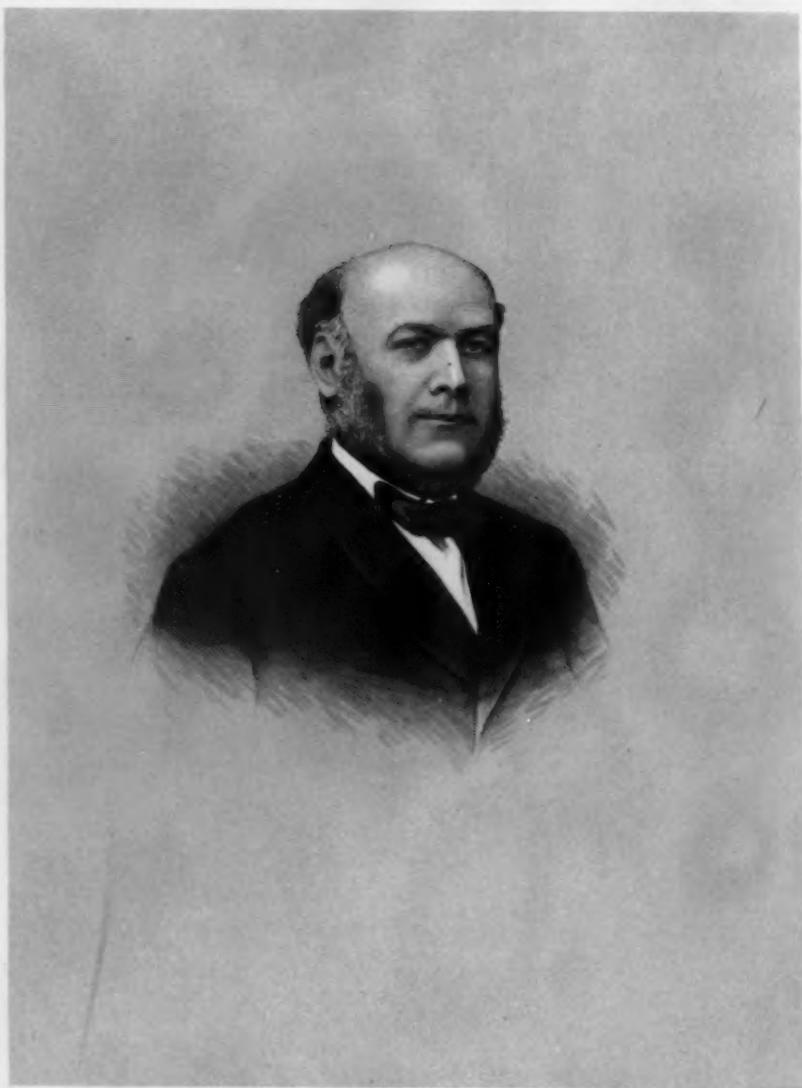
the previous Republican Government, which had granted freedom of conscience and of public worship to all sects. It was on this occasion that Emilio Castelar uttered the powerful and pathetic appeal which has been published in France under the title "La Liberté Religieuse." In deprecating the proposed revival of a kind of Inquisitorial commission, he said:—

"I do not accuse you, Señors, of wishing to re-establish the Inquisition; you do not claim again the stake nor the rack; but you demand that the dissident shall be a hypocrite, and that he shall simulate with his lips what he believes not in his heart. The will of man is not always involved in his belief or unbelief. One who has lost the faith of his earliest years, who sees no longer the sacred aureole around foreheads which once beamed, for him, with inspiration, —such an one may have the right to utter in his anguish the words which Christ spake upon the Cross: 'My God, why hast Thou forsaken me?' The criterion of religion is more than instinct, more than sentiment, more than intelligence, more even than the reason and judgment; it is that supernatural faculty of which St. Bonaventura speaks, in his life of St. Francis of Assisi, and which Schelling calls the *intellectual intuition* granted by God to his own elect. Señors, if such is your desire of propaganda, which I respect (for respect is due to every sincere belief), then persuade, convince, touch the hearts of the incredulous as Jesus did. Pray for them day by day, and erect in every thoroughfare a pulpit, from which to persuade, convince, and convert: but do not invoke the report of a royal commission, the authority of Government, or the laws of Parliament. Do not avail yourselves of the help of the gendarme. Religion wins, not by these, but by its apostles and martyrs."

Such are the means, such the efforts, by which the faith of Christ was at first promulgated, and which history teaches us have been the most powerful weapons in every great crisis of national revival and of religious and moral reformation. "To the awakening of the individual conscience," says James Martineau, "God has committed the true progress of mankind." If this be so, then may we hope for France, as we mark the arising, one after another, among her own children, of apostles, whose deeply roused conscience will not suffer them to cease, day and night, to warn, to teach, and to persuade, in matters of the deepest concern to her true life as a nation.—*Contemporary Review*.

* Appeal to the Mayors of France for the Abolition of the Official Sanction of the Social Evil.





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MR. JULES GRÉVY.

(PRESIDENT OF FRENCH REPUBLIC.)

THE TWO LIGHTS.

"When I'm a man!" is the poetry of youth. "When I was young!" is the poetry of old age."

"WHEN I'm a man," the stripling cries,
And strives the coming years to scan—
"Ah, then I shall be strong and wise,
When I'm a man!"

"When I was young," the old man sighs,
"Bravely the lark and linnet sung
Their carol under sunny skies,
When I was young!"

"When I'm a man, I shall be free
To guard the right, the truth uphold."
"When I was young I bent no knee
To power or gold."

"Then shall I satisfy my soul
With yonder prize, when I'm a man."
"Too late I found how vain the goal
To which I ran."

"When I'm a man these idle toys
Aside for ever shall be flung."
"There was no poison in my joys
When I was young."

The boy's bright dream is all before,
The man's romance lies far behind.
Had we the present and no more,
Fate were unkind.

But, brother, toiling in the night,
Still count yourself not all unblest
If in the east there gleams a light,
Or in the west.

Blackwood's Magazine.

M. GRÉVY, THE NEW FRENCH PRESIDENT.

BY THE EDITOR.

FRANÇOIS PAUL JULES GRÉVY was born at Montsous-Vaudrez, in the Department of the Jura, August 15th, 1813. He was educated at the College of Poligny, and afterward went to Paris to make his way in his chosen profession of the law. At the revolution of 1830, Grévy, who was then a Latin Quarter student, took part in the fighting, and was one of the captors of the Babylone Barracks. He stood fire with cool

bravery, and when the trouble was over returned quietly to his books, with the ambition to become a successful lawyer rather than a politician. On the occurrence of the Revolution of 1848, he was appointed Commissioner for the Jura by the Provincial Government, in which capacity he displayed such moderation and prudence that he was returned at the head of the poll, almost unanimously indeed, as one of the eight representa-

tives of that Department in the Constituent Assembly. He became a Vice-President and a member of the Justice Committee in that body, and spoke frequently and with ability. While holding aloof from the Socialists and the Mountain, he usually voted with the Extreme Left. He proposed in the debates on the Constitution that the Chief of the State should be entitled President of the Council of Ministers, elected by ballot by the Assembly, for an undefined period, and subject to removal at any moment. Urging the dangers of an election of a President of the Republic by universal suffrage, he said:—"If that ambitious man is a scion of one of those families which have reigned in France, if he has never explicitly renounced what he calls his rights, if commerce languishes, if the people are suffering, if there is one of those kinds of crises when distress and disappointment give them over to those who veil beneath promises designs against their liberty, do you answer for it that that ambitious man will not succeed in overturning the Republic." This amendment was rejected by 643 to 168.

Re-elected to the Legislative Assembly, M. Grévy spoke against the expedition to Rome and the Bills on the State of Siege, public meetings, restriction of the suffrage, and revision of the Constitution. On the *Coup d'État* he was among the Deputies who assembled at the Mairie of the 10th Arrondissement and was confined a short time in Mazas. He afterwards confined himself to the exercise of his profession, the only political case in which he figured being the defence of the thirteen members of the Republican Election Committee in 1864, and in 1868 he was elected *Bâtonnier*. In the same year, on a casual vacancy for the second circumscription of the Jura, he was elected by 22,428 to 10,290, the first signal success of the opposition in a rural constituency, and at the general election of 1869 no official candidate could be found to oppose him. In February 1870 he revived the famous proposal of the Questors of 1851, giving the Chamber the disposal of a military force; but was, of course, defeated. He was more successful in throwing open the election of *Bâtonnier* to the advocates at large. He spoke strongly

against the *plébiscite* of 1870, and was, in fact, one of the Irreconcilables as long as the Empire lasted. On its fall he took no part in politics till the elections of February 1871, when he offered himself in his own department, with the programme, "*La République toujours, la paix, sauf revanche, par tous les moyens acceptables.*" He again headed the poll and was also returned for the Bouches du Rhône, but decided in favor of the Jura. The Assembly, by 519 to 19, appointed him its President, re-appointing him every three months till May 1873. In January 1872, when M. Thiers tendered a resignation, eventually recalled, there was an idea of electing M. Grévy in his place, or of making him Vice-President, so as to provide against a vacant chief magistracy. His resignation of the Presidency of the Assembly, due to the outcry of the Left against his calling M. de Grammont to order for declaring a speaker impertinent, preceded by only a few days the fall of M. Thiers. His tact and impartiality as President were universally acknowledged. He had strongly opposed the Barodet candidacy, the immediate cause of M. Thiers's downfall. At the time of the Fusionist intrigues he published a pamphlet, entitled "*Le Gouvernement Nécessaire*," in which he argued that while it was a great mistake not to have founded a limited Monarchy when France possessed the elements for one, it would be an equal mistake now to attempt to found anything but a Republic. He spoke against the Septennate, maintaining that the Assembly was not entitled to create a power outlasting its own existence, and thereby claiming to bind its successor. On the same ground he abstained from voting for the Constitution of 1875, and refused to enter the Senate as a life-member nominated by the Assembly. He was re-elected in the Jura in 1876, and was then again appointed President of the Chamber, when he defined its task to be the proof that the Republic was a government of order, liberty, and progress. The late M. Schneider, President of the Corps Législatif, said of him in 1871, in his evidence before the Commission of Inquiry into the government of national defence: "At a time when there is so much degeneracy of character it is a real pleas-

ure to find a character so serious, upright, and lofty as that of M. Grévy ;" and Marshal MacMahon, on conferring with him towards the end of the crisis of 1877, said, " You are the most honest man I know." On January 30th, 1879, Marshal MacMahon resigned his position as President, and the same day, in a congress of the two Chambers, M. Grévy was elected (by a vote of 536 to 99) President of the French Republic for the term of seven years.

A Paris correspondent of one of the newspapers gives the following interesting details of the new President's character and habits in private life : " M. Grévy is not only the enemy of tinsel on men's coats, he is a man of republican simplicity in his ways. In his every-day attire, even in Paris, he has always donned a wide-awake instead of a silk hat ; and in summer time he may generally be seen sauntering about the boulevards clad all in gray, and crowned with a Panama. Though a man of considerable landed property, as estates go in France, he never set up a brougham till he became President of the Chamber, and he has always kept this modest one-horse vehicle (with a coachman out of livery) at Versailles. In Paris he uses cabs and omnibuses ; but it must be a very muddy day which compels him to ride at all. As Speaker of the Lower House he broke with the tradition of all his predecessors by giving no balls, but

only occasional dinner parties, which members of right and left attended. He will probably give concerts, for he delights in music ; but his favorite pastime of all is to play billiards, and to smoke cigars while making his cannons.

" M. Grévy is also a keen sportsman and an able agriculturist. In his native Jura he climbs the hills for game, and strolls about the valleys admiring his vines, his cattle, and his fields of maize. He is of somewhat taciturn mood, though very genial and sociable when he sees that conversation is expected of him, but the saying of smart things is by no means his forte. Few men more carefully weigh their thoughts before putting them into words ; and for that reason the sallies which he launches go with a deliberate aim and hit with telling force. He never loses his temper ; but he never hesitates either to speak out his mind with full frankness, and, if the occasion needs it, with considerable warmth. He will now have two official residences—one at Versailles, located in the ex-Prefecture, and the other the magnificent Elysée, in Paris. He will also have the run, for purposes of sport or pleasurable sojourn, of all the old royal and imperial chateaux—Fontainebleau, Compiègne, Pierrefonds. His salary will be \$120,000, with an addition of \$10,000 table money, and \$20,000 for office expenses."

LITERARY NOTICES.

THOMAS CARLYLE: HIS LIFE, HIS BOOKS, HIS THEORIES. By Alfred H. Guernsey. Appleton's New Handy-Volume Series. New York : *D. Appleton & Co.*

The absence of any biography, even the briefest, of Carlyle has long been a matter of regret to those who in reading his works have felt a desire to know something about the character and personality behind them. Hitherto the scant and bare details of the cyclopaedias and the occasional gossip of acquaintances have been about all that was accessible ; and Dr. Guernsey's little monograph, though leaving much to the future biographer of Carlyle, will probably meet a real and widespread want. It welds together in a picturesque and effective narrative all that is certainly known about Carlyle's birth and parentage, education and early life, experiences, character, and modes of liv-

ing and composition. Vivid passages from Carlyle's conversation, as recorded by the blind preacher Milburn, are made to throw light upon the inner workings of his mind as well as upon his habits and bearing in private life ; and such self-revelations as his published writings contain are detached from their merely literary surroundings and made to assist in the portraiture. Of course the materials for a minutely detailed and adequate life of Carlyle are not yet available ; but we think that there can be obtained from Dr. Guernsey's little book a really vivid and sufficiently faithful idea of the man as well as of the author.

The chief value of the work, however, lies in its criticism rather than in its biography. There are few equally important writings in any literature which it is more necessary to interpret by the character, and even the special

moods and circumstances, of the author than Carlyle's. He not only despairs what is called consistency, but he does not hesitate flatly to contradict and refute under the dominance of one feeling propositions and opinions which he had urged with all his characteristic vehemence and ardor while under the temporary influence of another. Indeed, nearly all his later writings are in direct antagonism to his earlier ones—the latter being inspired by a certain buoyancy of youth and hope and confidence in the destiny of man, while the former are the passionate invectives of a disillusioned man who sees nothing before either the race or the individual but the shooting of an abysmal Niagara.

For this reason it is absolutely essential in reading any of Carlyle's works to know the precise period to which they belong, and, if possible, the special circumstances under which they were written. It is also necessary to know whether the opinions expressed in the work which happens to be in hand are modified, corrected or confirmed by similar or opposite opinions recorded in another. In a word, it is of peculiar importance in approaching Carlyle's writings to have a trustworthy guide and interpreter; and this Dr. Guernsey furnishes in eminently compact and readable shape. He analyzes at considerable length the more important of them; offers sound and suggestive estimates of their characteristic qualities; touches upon their defects with a kindly but penetrating criticism; and illustrates what he has to say by numerous citations of those splendidly impressive passages in which Carlyle surpasses any modern author, save, perhaps, Macaulay.

The book is a pre-eminently readable as well as useful one, and deserves presentation in more permanent form than that in which it now appears.

THE LIFE OF LOUIS ADOLPHE THIERS. By François Le Goff. Translated from the Unpublished Manuscript by Theodore Stanton, A.M., New York: G. P. Putnam's Sons.

It is a curious and perhaps significant fact that the first formal and detailed biography of M. Thiers should appear in the United States; for the original work has not yet been published in France. Mr. Stanton's work, however, is something more than a mere translation. He has selected from the large mass of M. Le Goff's manuscript such parts as seemed best suited to a *cis-Atlantic* audience, has inserted an occasional anecdote or letter when these would assist the author's purpose, and has endeavored, either by clauses in the body of the page or by notes at the bottom, to explain references to French politics and customs, and to

fairly identify the different characters mentioned. Partly for this reason, probably, and partly because of the exceptional care and skill with which he has performed his task, the work reads less like a translation from a foreign tongue than like an original composition.

As regards the contents of the book, it was quite evidently written by the author with a view to its probable American readers. He thinks, as he states in his preface, that Americans have but a very vague and inexact idea of France, and that Thiers in particular has been gravely misunderstood and misrepresented by even the best-informed among us; and he addresses himself throughout his work to a rectification of those misconceptions which he thinks most prevalent. He rather overestimates, we think, the ignorance of intelligent Americans concerning French public men and the French people, and he does not always select those subjects which stand most in need of elucidation; but his book is an eminently instructive one, and will afford very valuable help toward an understanding of the obscurer movements and agencies in French politics during the last half century. It is all the more valuable in this regard because, while amply detailed and minute in its biographical portion, it records and discusses with the impartiality of an historian the great events and incidents in which Thiers played so prominent a part for so many years.

The volume is handsomely printed, and contains a portrait of Thiers engraved from an *eau forte* of the celebrated painting of Bonnat, a wood-cut showing his Paris *hôtel*, and a *fac-simile* of his handwriting photographed from the original manuscript of Thiers' famous posthumous letter to his constituents.

THE FAIRY LAND OF SCIENCE. By Arabella B. Buckley. New York: D. Appleton & Co.

Of all the attempts that have been made to present physical science in such a guise as to render it attractive as well as instructive to quite young people, this book of Miss Buckley's seems to us one of the most successful. The analogies which it establishes between the wonders and mysteries of Fairy Land and those real wonders and mysteries which science has found in Nature are plausible and suggestive without being so artificial as to repel acceptance; its expositions and definitions are simple and lucid to a degree that is rarely equalled in works of popular science; it exhibits a remarkable fertility of apposite illustration on the part of the author; and the experiments by which the exposition is helped along and its conclusions verified are of a kind which can easily be performed and which will be sure to pique the curiosity and stimulate the imagina-

tion of children. The style, moreover, though studiously simple and objective, is picturesque and graceful in high degree.

The book consists of ten lectures which were originally delivered before a mixed audience of children and their parents, and which have been rewritten in order to render certain points more explicit than was necessary in productions designed solely for oral delivery, when the written words could be supplemented by gesture, experiment, etc. The series ranges over almost the entire field of physical science, dealing, of course, only with elementary principles, but directing attention to all the more striking aspects of that wonderful fairy-land through which the procession of life moves on. Besides the introductory lecture on the analogies between the fairy-land of fancy and the realities of physical nature, there are chapters on "Sunbeams and the Work they do," "The Aerial Ocean in which We Live," "A Drop of Water on its Travels," "The Two Great Sculptors—Water and Ice," "The Voices of Nature and How we Hear Them," "The Life of a Primrose," "The History of a Piece of Coal," "Bees in the Hive," and "Bees and Flowers." The pictorial illustrations of the volume are of exceptional beauty.

ENGLISH ACTORS FROM SHAKESPEARE TO MACREADY. By Henry Barton Baker. Amateur Series. Two Volumes. New York: *Henry Holt & Co.*

Of the character and quality of Mr. Baker's work our readers have already had an opportunity to obtain some idea, as several of the articles of which it is composed have appeared at different times in recent numbers of the magazine. The work, however, in its present shape is not merely a reprint of the magazine articles. "Detached essays," says the author, "have been linked together so as to form a chronological history of actors and acting from Shakespeare to Macready. Some of the essays which have appeared have been considerably expanded, others have been relieved of irrelevant matter, and a number of new sketches have been introduced." The whole of it, though hardly entitled to be called "a chronological history of actors and acting from Shakespeare to Macready," is a very useful addition to the annals of the British stage, and will furnish the student with an admirable and much-needed supplement to the more copious and methodical chronicles.

For the general reader, who is supposed to seek amusement rather than instruction in his books, it would be difficult to suggest any work on actors and acting more likely than these volumes to afford him entertainment. Mr. Baker's style has something dramatic in its vividness and rapidity, and his method of treat-

ment is narrative rather than analytical, seeking to portray by characteristic anecdotes and personal reminiscences than to impart his conceptions by abstract terms. "It is still possible," he says, "from the vivid word-paintings bequeathed to us by contemporaries, to clearly picture many of the famous performances of the past. Such paintings have been assiduously collected, in order to place before the reader a distinct idea of the various schools of acting from the rise to that comparative extinction of the player's art which has taken place during the present generation."

The American edition of the work is issued in the tasteful style of the "Amateur Series," and has been provided with an index which much enhances its value over the English edition.

BISMARCK IN THE FRANCO-GERMAN WAR, 1870-1871. Authorized Translation from the German of Dr. Moritz Busch. In Two Volumes. New York: *Charles Scribner's Sons.*

In a recent number of the *ECLECTIC* we reproduced from the *Fortnightly Review* an elaborate article on the German edition of Dr. Busch's work by M. Emile de Laveleye, the eminent Belgian publicist. That article has left us little to say about the book itself, save that, as a whole, it is inferior in interest to the article which was based upon it, and which seems to have skimmed its cream. Herr Busch possesses many of the merits of *Boswell*, but also in a marked degree his defects; and among these latter is the habit of persistently obtruding himself upon the reader's attention. Some of Bismarck's most sprightly and characteristic table-talk will be immediately followed by verbatim reproductions of Herr Busch's stale, prosy, and tedious contributions to the "inspired" press of ten years ago; and when he has nothing to tell about "the Chief's" doings and opinions, he improves the occasion by substituting his own. The value and importance of the work could hardly be overestimated, mainly because of the importance of the personality and events with which it deals; but in sustained interest it is inferior to its reputation.

The English translation of the work is remarkably faithful and spirited, and the publishers have produced it in very attractive and appropriate style.

FOREIGN LITERARY NOTES.

M. ARGOUT, long resident in Egypt, has taken paper impressions of the whole of the tomb of Seti I. at Thebes.

MR. ATKINSON is preparing for publication a selection from the letters addressed to him by Miss Martineau during a long series of years.

MR. RASSAM has discovered a cylinder of Sennacherib dated B.C. 700. It will probably help to decide the exact year of Sennacherib's expedition against Hezekiah.

THE excavations at the supposed site of the hanging gardens of Babylon are said to have terminated. They have yielded many tablets from the time of Nabonidus to the Parthian era.

ÆSOP'S Fables, which were published not long ago in a Sanskrit translation, have been so well received by those who still read Sanskrit in India that a second and more complete edition has had to be prepared, which has just appeared in two small volumes. The translator is Narayan Balkrishna Godbole, B.A., First Assistant-Master at the High School, Ahmednagar.

MR. CHARLES DICKENS is compiling a "Dictionary of London," which aims at presenting, in a concise, convenient, and economical form, an intelligible epitome of every kind of practical information about London. "No work of its precise scope has," says Mr. Dickens, "been ever yet attempted; and the arrangement of the details will be in many respects as novel as the general plan."

MR. ROBERT BROWNING has consented to accept the Presidency of the New Shakspere Society. The original Prospectus of the Society, issued by its founder in November, 1873, said, "The Presidency of the Society will be left vacant till one of our greatest living poets sees that it is his duty to take it;" and we are glad to find that, after four years of honorable and useful work, the Society has been able to put at its head that "one of our greatest living poets" whose genius in power, life, variety, penetration into character, is closest akin to Shakspere's.—*Academy*.

WHAT strikes us in American work, literary and artistic, is the evidence that though the nation is young, the race is old. American apologists always account for the failings of their country, and explain her virtues, by the barbaric, uncouth, and vital character of a young people. But, in fact, those merits are the merits of age, those faults, in politics, in social life, and in the liberal arts, are the faults of corruption. Emerson is perhaps the subtlest thinker, Lowell the most exquisitely elaborate composer of prose, and the most finished critic of the time. So in the fourth and fifth-rate work of Americans, we have never found signs of the untaught and living growth of a young race.—*London Spectator*.

UNDER the editorship of Mr. J. R. Green, and the title "Classical and English Writers," Messrs. Macmillan & Co. have in preparation a series of small volumes upon the authors that

are chiefly studied in schools. The primary object of the series is educational; the endeavor will be made to give the information in a clear methodical form, but yet in a style so far attractive as to arouse an intelligent interest in the authors, their age and surroundings. Addressed in the first instance to schools and to candidates for examinations, these biographical and critical studies appeal also to the wider public who are interested in literature for its own sake. The following volumes are in a more or less advanced state of preparation (two, those on Euripides and on Milton, will be published in March): "Herodotus," by Prof. Bryce; "Sophocles" by Prof. Lewis Campbell; "Euripides," by Prof. Mahaffy; "Demosthenes," by Mr. S. H. Butcher; "Virgil," by Prof. Nettleship; "Horace," by Mr. T. H. Ward; "Cicero," by Prof. Wilkins; "Livy," by the Rev. W. W. Capes; "Milton," by the Rev. Stopford A. Brooke; "Bacon," by the Rev. Dr. Abbott; "Spenser," by Prof. Hales; and "Chaucer," by Mr. F. J. Furnivall. Others will follow should the idea meet with encouragement.

SCIENCE AND ART.

SOME RECENT ACOUSTICAL RESEARCHES.—The harmonic overtones which accompany a musical note are a well-known phenomenon, and their nature has been made pretty clear. There is another phenomenon presenting a certain analogy to this. It has lately been studied by a German physicist, Herr Auerbach, who applies to the notes generated the corresponding name of undertones. These undertones may be had by striking a tuning-fork vigorously, then placing its stem very lightly on a sounding-board. One hears the lower octave of the fundamental note of the tuning-fork. With suitable materials, Herr Auerbach also obtains the lower fifth of the lower octave, and the lower fourth of this tone—that is, the double octave of the fork's tone; in fact, these resonance tones form a series of harmonic undertones. The phenomenon appears to depend essentially on the strength of the vibrations and the imperfect elasticity of the resonance-surface of the plate. Herr Auerbach has tried a variety of substances for undertones with tuning-forks. He finds that some, indeed most, substances give these tones; that some give only a noise, as soon as the vibrations are moderately strong; and some always give the tone of the fork, no matter how strongly this is sounded. Another German observer, Herr von Strouhal, has recently given some attention to a kind of tones not much studied hitherto—viz., those which arise when a rod is quickly swung through the air, or when currents of air impinge on stretched wires or sharp edges,

&c. For pureness of tone, the swung rod must have all its parts moved with the same velocity, and it must be cylindrical. Herr Strouhal made an apparatus consisting of a vertical wooden column with two horizontal arms, between which the bodies to be forced through the air (mostly wires) were fixed, and he rotated the frame in its upright position at various speeds. Thus he got notes which rose in intensity and pitch with the speed. He found that the pitch of the "friction tone" (as he calls it) is independent of the tension of the wire, likewise of its length. But the length of the wire has a marked influence on the intensity of the tone. The longer the wire, the stronger (*ceteris paribus*) the tone. Further, the substance of the body is a matter of indifference; but the height of the tone is directly proportional to the velocity of motion, and inversely so to the diameter of the wire. The author finds, moreover, that there is a way of making the "friction tone" produce the wire's own tone—viz., when it is brought up to the same pitch with this (the wire being preferably thin and elastic), and similarly, by raising the pitch gradually higher, the succession of overtones of the wire are generated. The distinct character of the general phenomenon above indicated appears from the fact, among others, that with rising temperature the friction tone becomes lower. The true nature of these tones is at present somewhat obscure.

EXPERIMENTS WITH NEEDLES AND MAGNETS.—Needles may be used as magnets, and made to float vertically in water by attaching a speck of cork to the eye end. If, while thus floating, a large magnet is held above them, they arrange themselves in certain definite groups, which, according to Mr. A. M. Mayer, exemplify molecular structure and molecular action. In some instances the groups assume an unstable form; but by movement of the upper magnet, or at times a knock on the table, they take up a stable configuration. These configurations may be recorded (if before immersion the upper ends of the needles have been touched with printer's ink) by laying upon them a piece of flat card-board, when the place of each needle will be shown by a dot; and by drawing a straight line from dot to dot, the representative forms become at once apparent. From the triangle, square, and pentagon, they pass into hexagons, octagons, decagons, and compose groups within groups: "stable nuclei which may be suggestive to chemists and crystallographers."

PASSAGE OF STORMS ACROSS THE ATLANTIC.—Professor Loomis, untiring in his meteorological investigations, has, by the aid of a series of charts, succeeded in identifying a number of storms, and in following thirty-six in

their course across the Atlantic. Eight of them became merged with other storms on the way; hence twenty-eight only reached the coast of Europe within the time included in the discussion, March 1874 to November 1875. Nearly all of these storms, says the Professor, pursued a course north of east, and passed considerably to the north of Scotland; hence they did not exhibit much violence on the coast of England. He concludes, therefore, that when a centre of low barometric pressure (below twenty-nine inches) leaves the coast of the United States, the probability that it will pass over any part of England is only one in nine; the probability that it will give rise to a gale anywhere near the English coast is one in six; and the probability that it will give rise to a very fresh breeze is one in two. A noticeable fact in regard to Atlantic storms is their slow rate of progress, due partly to the erratic course of the centre of the low area, partly to the blending of two areas into one, which pushes the most eastern centre back to the west. And further, "there seems in the Atlantic Ocean to be a special cause which frequently holds storms nearly stationary in position from day to day, and this cause is probably the abundance of warm vapor rising from the Gulf Stream, in close proximity to the cold dry air from the neighboring coast of North America. Hence we see that when American storms are predicted to appear upon the European coast, and it is assumed that they will cross the ocean at the same rate as they have crossed the United States, the prediction will seldom be verified."

NEW METHOD OF DETACHING FOSSILS FROM THE ROCK IN WHICH THEY ARE IMBEDDED.—Collectors of fossils, especially of fossil plants, have often had to deplore the destruction of specimens by hammering them from the rocks in which they were imbedded, or in splitting fragments of stone in hope of discovery. Destruction and disappointment are now obviated by a process described by Baron Ettingshausen, an eminent Austrian phytopalaeontologist, in a Report on phytopalaeontological investigations read before the Royal Society. The process is simple: the lumps of stone supposed to contain the fossil leaves and stems are soaked for say six months in water under a pressure of from two to three atmospheres. Wherever a fossil is imbedded, the substance of the stone is not continuous, however compact it may be, and these microscopic interstices become filled with water under the soaking and the pressure. The lumps of stone are then taken out and exposed to intense cold; the thin films of water freeze; the stones open of themselves, and expose their long-buried contents uninjured. In some instances the soaking and

freezing have to be repeated ; but the trouble is repaid by the fact that the more compact the stone, the less imperfect will be the fossil, as was demonstrated by specimens exhibited at the reading of the Report.

IRON IN THE ATMOSPHERE.—Observations on snow collected on mountain-tops and within the arctic circle far beyond the influence of factories and smoke, confirm the supposition that minute particles of iron float in the atmosphere, and in time fall to the earth. Some physicists believe that these floating particles of iron are concerned in the striking phenomena of the aurora. Gronemann of Göttingen holds that streams of the particles revolve round the sun, and that when passing the earth they are attracted to the poles, and thence stretch forth as long filaments into space. But as they travel with planetary velocity, they become ignited in our atmosphere, and thus produce the luminous appearances or auroræ. In his recent voyages, Professor Nordenskiold examined snow far in the north beyond Spitzbergen, and found therein exceedingly small particles of metallic iron, phosphorus, cobalt, and fragments of Diatomaceæ.

DRY FOGS.—In the manufacture of alum there used formerly to be great loss by evaporation from the open pans in which the liquid under treatment was kept just below the boiling-point. Eventually this loss was prevented by covering the liquid with a thin layer of coal-tar ; the consumption of fuel was in consequence diminished. "This simple though important technical application," says Dr. Frankland, "suggested to me a condition of things under which the existence of so-called 'dry fog' would be possible. From our manufactories and domestic fires vast aggregate quantities of coal-tar and paraffin oil are daily distilled into the atmosphere, and, condensing upon, or attaching themselves to, the watery spherules of fog or cloud, must of necessity coat these latter with an oily film, which would in all probability retard the evaporation of the water, and the consequent saturation of the interstitial air."

This theory having been tested and verified by various experiments, Dr. Frankland concludes that dry fog is accounted for, as also "the frequency, persistency, and irritating character of those fogs which so often afflict our large towns." Moreover, "some of the products of destructive distillation of coal are very irritating to the respiratory organs, and to a large amount are scarcely if at all volatile at ordinary temperatures."

COLD WATER IN COLD WEATHER.—It should not be forgotten that the sole use of cold water, in cold weather is to stimulate the organism to

increased activity. A great mistake is made when any part of the body is immersed in cold water, and left to part with its heat without any guarantee that the energy of heat-production so severely taxed can respond to the requirement. It may easily happen that the internal calorific force—if we are at liberty to use that expression—will be exhausted ; and if that occurs harm has been done. The obvious principle of health preservation is to maintain the circulation in its integrity ; and while the error of supposing that clothing can do more than keep in the heat generated within is avoided, it is not less needful to guard against the evil of depriving the body of the heat it has produced. The furnace should be well supplied with suitable fuel—that is, nutritious food ; the machinery of heat production, which takes place throughout the organism, not in any one spot or centre, should be kept in working order, and nothing conduces to this end more directly than the free use of the cold douche and the shower-bath ; but the exhibition of these popular appliances in all or any of their forms, ought to be restricted to a few seconds of time, and unless the evidences of stimulation—redness, and steaming of the surface—are rapidly produced, the affusion should be laid aside. The use of cold water in cold weather is a practice which must be governed by rules special to each individual case ; and it is with a view to warn the public against the recourse to general recommendations we allude to the subject. Whether the practice recommended be that of plunging the feet in cold water before going to bed, to procure sleep—a reckless prescription, founded on a physiological fallacy—or any other use of cold water, the only safe course is to seek the counsel of a medical man conversant with the patient's peculiarities ; and particularly in the cases of children we urge that this precaution should be observed.—*Lancet.*

HONEY.—The sweet substance "nectar" found in blossoms and flowers has been subjected to experiment by Mr. Wilson, who from his results has worked out some curiously interesting calculations. For example, one hundred and twenty-five heads of clover yield approximately one gram of sugar ; one hundred and twenty-five thousand heads yield one kilogram ; and as each head contains about sixty florets, seven million five hundred thousand distinct flower-tubes must be sucked in order to obtain one kilo of sugar. "Now," continues Mr. Wilson, "as honey, roughly, may be said to contain seventy-five per cent of sugar, we have one kilo equivalent to five million six hundred thousand flowers in round numbers, or say two and a half millions of visits for one pound of honey. This shows what an amazing

amount of labor the bees must perform." A notable part of the sugar is cane-sugar, which is remarkable, for honey containing cane-sugar is looked on by dealers as adulterated. A nice question here arises as to the way in which the nectar is converted into cane-sugar while in possession of the bee.

A BURIED FOREST.—An interesting geological discovery has been lately announced, which was made by Dr. Moesta, the Geological Director of Marburg, in the course of some extensive explorations in the neighborhood of Rotenburg on the Fulda, in Hesse Cassel. From his investigations, Dr. Moesta has come to the conclusion that an oak wood lies buried in that portion of the valley of the Fulda, at about a depth of from six to nine feet below the surface. This wood flourished at a very remote period of the earth's existence. Explorations carried on in the bed of the Fulda has brought to light several of the trees. It is estimated that between 200 and 300 trees are embedded in the river bed between Hersfeld and Melsungen (about thirty miles), which would warrant the expectation that at least ten times that number are to be found in the soil of the adjoining valley. The greater number of the trees discovered were in good preservation; but, owing to the action of the water through unnumbered ages, they have become thoroughly black in color. They have also become very hard and close, so that they would be excellent material for carving and ornamental cabinet-work. Some of the trees are of great size; one taken out of a gravelly portion of the bed opposite the village of Baumbach, and since sent to the Geological Museum at Berlin, was 59 feet long, nearly 5 feet in diameter near the root, and about 38 inches at the top, so that its solid contents are about 630 cubic feet. Even larger specimens have been found. It is reported that the furniture and fittings of the Geological Museum at Marburg are to be made from this long-buried timber. An interesting question remains to be solved: Do those buried oaks belong to a species still existing or to an extinct one?

VARIETIES.

WISE SAYINGS OF JEWISH SAGES.—The path of duty in this world is the road to salvation in the next.

Happy is he who fears God in the prime of life.

Who is powerful? He who can control his passions.

Who is rich? He who is contented with what he has.

Charity is the salt of riches.

Blessed be he who gives to the poor, albeit only a penny; doubly blessed be he who adds

kind words to his gift. Say not, because thou canst not do everything, "I will do nothing."

Associate not with the wicked man, even if thou canst learn from him.

He who denies his guilt doubles his guilt.

This is the penalty of the liar: he is not believed when he tells the truth.

It is a sin to deceive thy fellow-man, be he Jew or Gentile.

Be the first to hold out the hand of peace.

Prayer without devotion is like a body without a soul.

Improve thyself, then try to improve others.

Beautiful are the admonitions of him whose life accords with his teachings.

The wicked, whilst alive, is like dead; the righteous after death is still alive.—*Excelsior.*

POETRY AND PROSE.—Rhythm is associated with the first utterances designed for frequent repetition and continued life. The praise of chiefs, the cherished memories or beliefs of a people, formed into musical sequences of words with alliteration, or other device to secure for each important word both emphasis and good help to its recollection, make the substance of that early literature which lives on the lips of its authors and in the memories of those who learn it from them and diffuse it pleasantly in cadenced chant among the people. Prose was not written when few read, and literature lay between the reciters and a world of listeners. When there were more readers, cultivated men and women, with the written page before them, could recite at will for pleasure of their friends. Still, they were supplied chiefly with verse; but the good stories current among daily talk could be corrected and written in the manner of those who told them well in the direct phrase of common speech. Such tales in prose Boccaccio told again for the Italians in his "Decameron," about the middle of the fourteenth century. But when Chaucer and Gower followed the example of his story-telling, their English tales were still in verse, except that Chaucer included two prose pieces in his Canterbury Tales—a moral story from the French, and a homily for his Parson. The direct preaching of Wiclif, and his urging of reform upon the Church and people, are represented also by English prose tracts and sermons, which are thoroughly simple and straightforward, as it is the nature of right prose to be. The word "Prose" means straightforward. It is derived from the Latin *prosus*, and so was the name of a Roman goddess, Prorsa, called also Prosa, who presided over ordinary births with the head foremost. Prose signifies, therefore, the direct manner of common speech without twists or unusual ways of presentation. Coleridge said that he wished our clever young poets would remember his

"homely definition of prose and poetry—that is, prose is words in their best order ; poetry, the best words in the best order." The definition may be homely, but it is not true. No writer of prose would wish to use second-best words. Setting aside the difference that lies deep in the nature of the thought, there remains only the mechanical distinction that verse is a contrivance for obtaining by fixed places of frequently recurring pause and elevation of the voice, by rhyme and other devices, a large number of places of fixed emphasis, that cause stress to be laid on every important word, while they set thought to music. Whatever will bear this continuous enforcement is fit matter for verse ; but the customary thought of men, though put into words that fit it perfectly, and are therefore the best, is less intense, and therefore is best expressed in the straightforward method of our customary speech.—*Cassell's Library of English Literature.*

MR. FREDERIC HARRISON ON BOOKS.—An evening lecture at the London Institution was recently delivered by Mr. Frederic Harrison, his subject being "The Misuse of Books." There were, he said, many ways of abusing books, but not many would follow the example of a college tutor he had known, whose life-passion was the buying and reading of books ; but who always threw the leaves, as he read them, into the fire, as either worthless or already printed on his memory. The hoarding up of rare books of which we made little or no use was a more common foible ; but the worst misuse of the art of reading he knew of, and at the same time the most widely spread, was the waste of time and attention upon utterly trivial productions, while leaving unread or forgotten the greatest and best books ever written. Even scholars indulged too much in promiscuous reading, although the longest life and the greatest industry would not enable a man to master a hundredth part of the books really worth reading. The great thing to know was what sort of reading to avoid. We should be as much on our guard against a chance book as against a chance companion. The enormous multiplication of books in the present day was not wholly favorable to mental growth, and for the last 300 years it had never been harder than now to select the right books to read. He argued at considerable length on the absolute necessity of confining our ordinary reading to the very best authors, whose books, he complained, were sadly neglected in these days. He endorsed in general a proposal which had been put forth for the guidance of the more thoughtful in the choice of books for constant use, not dwelling on the theory of education underlying it, but simply

specifying the method on which it was framed. The authors comprised would not number more than between 100 and 200 ; representing poetry, history, science and religion. The first thing was to attempt to get together what was best in all the great departments of human thought, so that no part of culture might be wholly neglected or wanting. The next was to gather into one collection the greatest and best books in each department, and such only. Thirdly, the test of the value of the books to be what they say, not the manner of saying it. Save in the highest kinds of poetry, grace or form should not count. Lastly, the verdict to be given by the common voice of mankind. Mr. Harrison added that as to the best hundred books, or so, the world had long been pretty well agreed. He had provided himself with some such catalogue twenty years ago—of course, not as a bar to other reading. Such a list would serve to check indiscriminate wandering in the pathless fields of literature, and tend to remind us daily how many are the books of inimitable beauty and glory which we have never even taken into our hands.

IN SNOW.

O ENGLISH MOTHER in the ruddy glow
Hugging your baby closer when outside
You see the silent, soft, and cruel snow
Falling again, and think what ills betide
Unshelter'd creatures,—your sad thoughts may go
Where War and Winter now two spectral wolves,
Hunt in the freezing vapour that involves
Those Asian peaks of ice and gulfs below.
Does this young Soldier heed the snow that fills
His mouth and open eyes? or mind, in truth,
To-night, his mother's parting syllables?
His coat is red—but what of that? Keep rutherford
For others; this is but an Afghan youth
Shot by the stranger on his native hills.

[¹ "Most of the Afghan dead were fine well-built young fellows."—Special Correspondent of the *Standard*, December 10, 1878.]

—*Fraser's Magazine.*

STANZAS.

THERE is a tender hue that tips the first young leaves of
spring;
A trembling beauty in their notes when young birds learn
to sing;
A purer look when first on earth the gushing brook
appears;
A liquid depth in infant eyes that fades with summer
years:
There is a rosy taint at dawn that flings the brighter day;
A sound of innocence and joy when children shout at
play;
A laughing breeze at dewy morn that faints with sultry
noon;
A silver veil that softest hangs around the maiden
moon:—
The scent that roses fully blown about their beauty
fling
Is sweet, but can not with the breath of early buds com-
pare.
So doth there bloom a gentle love in life's enchanted
spring,
That fills the breast with feelings age can never hope to
share.

CECIL MAXWELL LYTHE.

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